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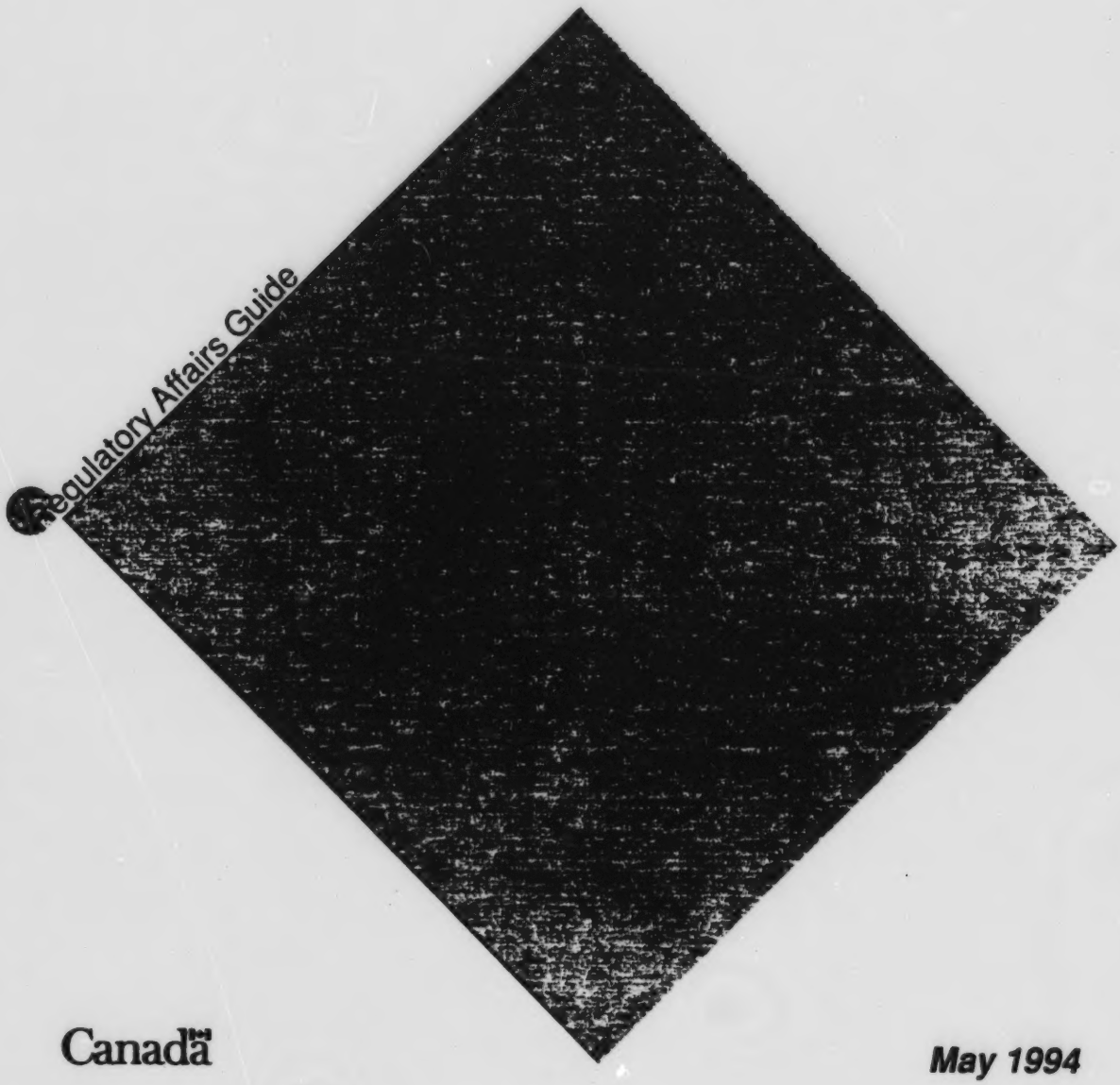
Assessing Regulatory Alternatives



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What This Guide Can Do For You

This guide assumes that you are faced with a problem, that you consider government intervention justified, and that you're trying to find the best way for the Government to intervene.

In this situation, the Government's Regulatory Policy requires departments and agencies to demonstrate that:

1. Government intervention is justified, and regulation is the best alternative.
2. Canadians have been consulted.
3. The benefits outweigh the costs to Canadian governments, businesses and individuals.
4. The regulatory activity impedes as little as possible Canada's competitiveness.
5. Regulatory burden has been minimized through co-operation with other governments.
6. Systems are in place and resources sufficient to manage regulatory programs effectively.

Implicit in the Policy, therefore, is the requirement that alternatives to regulation, and alternative forms of regulation, be fully considered.

This Guide will help you approach the job of assessing regulatory alternatives in an organized and consistent fashion. It is divided into four parts:

Part 1: How to Find the Best Alternatives
Part 2: Factors Affecting Behaviour
Part 3: Alternatives to Regulation
Part 4: Alternative Forms of Regulation

How to Use the Guide

This Guide is not intended to be read from cover to cover.

First, look at the analytical framework and work through the process in Part 1.

To identify the factors at work (including social, psychological and economic factors), go through the questions in Part 2.

Question 10 of Part 1 asks you to identify alternative instruments that may help solve your problem. At this point, look at the alternatives to regulation in Part 3. For each alternative, you'll find examples and information on advantages, disadvantages, factors favouring use, contraindicators, and program delivery implications.

If you're considering regulation, turn to Part 4 for examples and information on alternative forms of regulation.

This Guide is weighted neither for nor against regulation. Rather, it stresses that combinations of instruments may be required. What it does is provide a structure for analysis to help you find the combination of policy options that will work best.

Other publications, guides, learning aids and brochures are available from Regulatory Affairs, Treasury Board of Canada Secretariat: (613) 952-3459.

Part I: How to Find the Best Alternatives

The Analytical Framework

The analytical framework used in this Guide is built on the following principles:

- regardless of how the Government intervenes, whether by regulating, taxing, owning businesses, or promoting voluntary action, the objective is to solve problems;
- the problems are created by the behaviours of various players;
- so, what the Government really wants is to change the behaviours that contribute to or create the problem;
- however, there are powerful external factors (economic, social, and psychological) that influence how much the behaviours conform with what the Government wants; they may have a much greater impact than any intervention by government;
- the optimal strategy, therefore, is either to strengthen the factors that bring about the desired behaviours (the incentives), or to weaken or eliminate the factors that bring about undesirable behaviours (the disincentives);
- the Government's decision on how to handle a problem should be based on a systematic comparison of possible alternatives.

The Process

Finding possible alternatives involves answering 13 questions. These questions reflect the Government's Regulatory Policy and, flowing from that, the key information requirements of the Regulatory Impact Analysis Statement. They also reflect the latest thinking on how to integrate risk management principles into regulatory decision-making and how to maximize compliance with regulatory requirements.

Question 1. What is the problem?

Begin by defining the problem. You don't want to get too technical at this stage, but do look for the real problem. For example, is the problem that some people still don't know about the hazards of smoking, or is it that health costs from smoking-related illnesses are too high and we want to reduce the costs? Is it that unsuspecting consumers could mistake margarine for real butter, or is it that every dollar spent on margarine is three cents less income for our dairy farmers?

You'll probably find that the problem is multi-faceted. The Government's approach to solving problems is normally multi-faceted too.

Question 2. Is government intervention justified?

Consider whether the Government should intervene. The Government can't deal with every problem; why should it get involved in this one? While elected representatives will make the final decision, your work is to inform them – to analyze the problem, find precedents, and assess the implications of action or inaction.

Question 3. What is the objective of intervention?

If you conclude that the Government should be trying to do something, ask yourself, "What do we want to accomplish?" This is the stage where you define the objective in terms of, for example, reducing the risk or injury or sickness to a specified level or range.

As you formulate your objective, remember that even if people followed a standard of behaviour 100 per cent, you probably wouldn't be able to completely eliminate the problem. Particularly for safety and health problems, therefore, you'll want to define the objective in terms of acceptable risk levels. Think about how society views the activity, and to what degree it's willing to tolerate the harm you're trying to prevent. This kind of issue cannot be dealt with simply by applying economic analysis; it requires a political judgment.

Risk Analysis and Regulatory Decision-Making

Risk analysis can be a powerful tool in helping you find the right type and stringency of regulation. But it is only a help -- not the whole solution. Somebody still has to make judgments about how much risk can be tolerated. This becomes particularly important in the area of safety and health regulation.

The noted regulatory expert, W.T. (Bill) Stanbury, has observed that people seem to be more concerned with how they may die or be injured than with how likely they are to die a certain way. Health risks from smoking and drinking are significant and well documented, yet we do not impose extensive or stringent regulatory controls on consumption of tobacco and alcohol. By contrast, workplace injuries seem to bother us more: we have elaborate rules and processes to reduce the risk of this type of harm. Yet even here, the degree of regulatory control is best described as moderate.

A greater contrast is our strong aversion to dying in a plane crash. We go a long way to minimize the risk by regulating such matters as who can fly a plane, how healthy they must be, what training they must have, what level of expertise they must attain, who can offer air services, the design and manufacture of aircraft, and maintenance of the equipment.

Why the differences? A key factor appears to be how much control the individual has over the activity that may cause harm. The more control the individual has, the more we are willing to tolerate higher levels of risk (e.g., smoking). As the individual's control over the situation diminishes, our willingness to tolerate risk decreases as well (e.g., air safety).

Question 4: What are the behaviours that are creating or contributing to the problem?

Translating the problem into specific behaviours is a critical step: these are the behaviours you want to change. Make sure you focus on the behaviour, not the problem. For example:

More helpful statements	Less helpful statements
Manufacturers are making certain products that could hurt people.	*Products are unsafe.*
Manufacturers are not making efficient household appliances.	*Household appliances are energy inefficient.*
The companies operating on this river are dumping too much waste into the water.	*These streams are polluted.*

Question 5: Who are the key players?

Remembering that it's people who make decisions and take action, start to define the key players. Who are they? What is their interest in the matter? How are they behaving? The more you know about them, the greater your chances of success. Divide them into two groups: those whose behaviour you want to change and those who may be able to help.

Those whose behaviour you want to change. Identifying these people precisely is very important because different alternatives may work at different levels and on different people. If there are only a few, identify them individually. If there are many, break them down into categories. Consider: geographic location, market structure, level of production, size of firm, nature of ownership, position in firm, importer or exporter. Work down through the levels within organizations and out into the marketplace. Include owners, directors, officers, workers, advisors, insurers, creditors, debtors, customers, and supporters.

Those who may be able to help. There are others who may have an interest in whether and how the problem is tackled (e.g., consumers, industry associations, consumers' associations, environmental groups). First, identify the people who would benefit directly. Then find those who might benefit indirectly or who simply want to see the problem fixed. Don't forget to look at those whose behaviour you want to change; some of them may be potential allies as well. Ask yourself:

- If the problem were solved, can we identify the people who would benefit? Who are they and where are they located?
- How strong is their individual and collective interest in seeing the problem solved? Do they favour certain approaches?
- Are they organized? Do they have resources?
- Are they in a better position to bring about a change in behaviours? Have they been, or are they likely to be, effective in promoting change?
- How can you strengthen the relationship with these people or gain new allies?

Question 6: What is the behavioural profile?

A behavioural profile is simply a way of describing to what extent the various players are engaging in problematic behaviours. It will help you identify the priorities for action if the Government decides to intervene.

It is important to differentiate by categories of players (or by individuals if the group is very small). You may have to group related behaviours together to make the task manageable. You can draw up the profile in words or represent it as a graph.

- What behaviours pose the greatest risk to achieving the Government's objectives?

- What are the most important targets for government attention, taking into account both the frequency and consequences of the contributing behaviours?

Question 7: What external factors are influencing the behaviours?

A variety of factors influence the behaviour you're trying to change. Although most are external to the Government, they can be influenced to varying degrees by government intervention.

The next step, therefore, is to figure out which factors are working for and which against the behaviour you want. Looking at each behaviour or each group of behaviours, assess whether the following factors are operating as incentives or disincentives to the change you want.

- Do people understand and accept that there is a problem?

- Do they understand and acknowledge their contribution to the problem?

- Do they understand and accept the Government's objectives?

- Do they understand and accept what you want them to do?

- Are they capable of to behaving that way?

- Are social and psychological factors involved?

- Are economic considerations involved?

- Can the Government or other players monitor behaviour, promote the desired behaviour, and sanction non-conforming behaviour?

Part 2, **Factors Affecting Behaviour**, describes how these factors operate. It also poses questions to help you think about each factor.

Question 8: What (changes in) behaviours do you want?

At this point, you are translating the objectives into desired changes in behaviour. Either you want people to do more of something they are already doing, or you want them to do less. Often, it isn't a matter of eliminating a behaviour entirely, but of modifying it in some way. Remember to focus on the behaviour, not the objective. For example:

More helpful statements	Less helpful statements
We want manufacturers to design, develop, and manufacture products that are less likely to hurt people.	*We want safe products.*
We want importers to import products that are less likely to hurt people.	
We want people to buy products that are less likely to hurt them.	
We want manufacturers to make more efficient household appliances.	*We want more efficient household appliances.*
We want companies to reduce the amount of pollutants they are discharging into the water so that the maximum level of pollutants is x parts per billion.	*We want clean water.*

Question 9: How much change in behaviour do you really need?

This question builds in a reality check. You need to determine what level of non-conforming behaviour you are willing to tolerate. Remember:

- no matter what the form of government intervention, people probably won't conform to the desired standard of behaviour 100 percent; and
- even if they did, would it automatically mean that you'd achieved your objective?

How much change in behaviour would be needed, then, to declare success? The answer to this question gives you a meaningful target, expressed in terms of behavioural change. Now you can begin to assess alternative ways for the Government to accomplish this change.

Question 10: What instruments will best bring about the desired behaviours?

Now that you have a target, you can think about how to achieve it. First, consider the public policy instruments other than regulation that governments use to influence behaviour:

- taxation
- expenditure
- loans and loan guarantees
- user charges
- public ownership
- persuasion
- modification of private law rights and
- insurance schemes

To determine whether one or more of these might be appropriate, work your way through **Part 3: Alternatives to Regulation**.

If, however, you select regulation, you can look into the alternative forms of regulation listed in **Part 4**.

At this stage, you are simply identifying possible instruments. Many can be rejected quite easily. For instance, if the minister has said that the Government has no money to spend on the problem, it's a waste of time to seriously consider large-scale expenditure programs. In other words, keep an open mind, but weed out methods that are obviously not viable. Make a note of those approaches you think might be viable based on what you've learned from answering questions 1 through 9.

The most important thing to remember during this first cut is the strategy for the Government's intervention. You want to maximize the benefit gained from the Government's involvement. The best intervention methods will strengthen the factors working in favour of the desired behaviour, or weaken those working against it.

Since this approach relies on, rather than working against, the economic, social, and psychological forces that shape the behaviours you want to change, it is more likely to result in less intrusive types of intervention.

Question 11: How would each alternative work in practice?

You now have a short-list of possible methods for intervention. The next step is to create a preliminary model of how each alternative would work. This allows

you to think through the practical implications of an alternative before conducting a more detailed impact analysis.

For most alternatives, you'll need only a brief outline of arrangements in four areas:

- statement of desired behaviours (behavioural specifications)
- promotion
- monitoring and
- sanctioning

You may be familiar with these categories from modelling regulatory programs, but they also work for non-regulatory alternatives.

- How will you determine and modify the behavioural specifications? Who will be involved?
  - Might this be handled through an industry organization or perhaps an independent standards-writing body?
  - How will consumer interests be involved?
  - What form will the specifications likely take?
  - Who will approve them?
  - How will they be updated?

- How will you promote compliance ? Who will be involved?
  - Will government play a role?
  - Will the standards body publish them?
  - Will educational programs be provided?

- How will you monitor behaviour to determine whether people are complying? Who will be involved?
  - Will compliance be self-evident or will some mechanism be required?
  - Who will be involved in monitoring: competitors? consumers? governments?
  - How will you know if the voluntary approach is working?

- How, and by whom, would non-conforming behaviour be sanctioned? Who would be involved?

Now when the minister asks, "What are our options and how would they work?", you will have the answers. Logically, the minister's next question would be, "What do you think we should do?" To have the answer ready, you'll want to assess each alternative in more detail, determining its viability and its comparative advantages.

Question 12: What are the comparative advantages of each alternative?

Different types of approaches -- regulatory and non-regulatory -- give inherently different levels of assurance that the risk will be reduced. To judge which of the regulatory and non-regulatory alternatives you've identified are applicable and suitable, you'll need to assess each of them according to the following criteria:

- Is it legal?
- Would it be effective?
- Would it be efficient?
- Would it be fair?
- Is it too intrusive?
- How visible would it be?
- How fast can I have it?
- Is it responsive?

a) Is it legal?

There are legal limits on what actions governments can take in dealing with problems. The *Constitution Act* allocates legislative (and governing) authority, setting limits on what matters federal and provincial governments are allowed to deal with. The *Canadian Charter of Rights and Freedoms* sets limits on how governments can exercise their authorities. Constitutional common law principles also apply. There may be other, non-constitutional, legal requirements that could limit use of an alternative. To get help, contact your Department of Justice legal advisor.

b) Would it be effective?

Here, you're judging how close the option will take you to the target you specified in Question 9. Look at precedents in other jurisdictions or other areas of federal involvement. Review the factors that operate as incentives and disincentives to the desired behaviours. There may be other forms of government intervention that are more effective than regulation.

- How would this alternative stengthen or weaken the factors that influence the behaviours contributing to the problem?

- Can this alternative be focused specifically on these factors and the related behaviours?

- Would it be possible to get a broad consensus on the desired behaviour?

- How difficult and costly would it be to detect non-conforming behaviour?

- Would there be meaningful rewards for those whose behaviour conforms?
- Would there be meaningful sanctions for those whose behaviour does not conform?
- On balance, how close would this alternative bring you to the target?

c) Would it be efficient?

An efficient solution is one in which the benefits equal or exceed the costs. To determine this, you'll have to assess the following:

- benefits;
- cost to government (incluing costs of participating in voluntary arrangements);
- direct private sector[1] and government compliance costs;
- general economic (allocative) efficiency losses; and
- the impact on the ability of relevant markets and participants to adjust over time (including the impacts on productivity and competitiveness).

You need to find out in what direction the balance is tipped, and by how much. At this stage, just try to get a general idea of benefits and costs.

Be realistic: you're not going to be able to reduce everything to a simple dollar comparison. Your analysis will have two parts: quantifiable impacts and non-quantifiable impacts.

d) Would it be fair?

Ministers and others will instinctively gauge the fairness of a proposed action, so it's important for you to have done so first. Who would win and who would lose? By how much? How would this change the relative standings of the various players affected?

e) Is it too intrusive?

Most people would agree that the Government shouldn't interfere with people's lives or the affairs of the private sector unless there is a very good reason. The Regulatory Policy reflects this. They would also agree that, even then, interference with individual rights and liberties should be kept to the absolute

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[1] The Business Impact Test is a tool you should consider using to determine the impacts of a proposal on the private sector. It allows you to collect and analyze specific insights directly from stakeholders. Contact Regulatory Affairs, TBS, for more information.

minimum. There are four facets to intrusiveness: scope, depth, precision and subject:

- Scope: How many people would be affected by this method of intervention?
- Depth: How detailed would the standards of behaviour be? Is this macro- or micro-management?
- Precision: What form would the behavioural specifications take? If, for example, a standard is required, can you get by with a performance specification or will you have to address technical design attributes?
- Subject: What kind of behaviour is being addressed? Is it something that is generally accepted as being the Government's business, or is it something that is clearly out of bounds?

f) How visible would it be?

If there is a choice between a highly visible and a not so visible way of doing a good thing, government will usually choose the former. This makes perfect sense: government is there to serve the people; people need to know if, when, and how they are being served. If this alternative is used, therefore, will it be evident that the Government is taking action to deal with the problem? Is this alternative more or less visible than the others? Can the visibility be increased through government action such as public announcements or other communications?

g) How fast can I have it?

Most politicians enter public life because they really want to do good things for people. You can assume that they'd prefer to see these good things happen sooner rather than later. The minister will want to know about any significant differences in timing for the alternatives.

You should be prepared, therefore, to indicate how quickly each alternative could be implemented and how long it would take to generate results. For instance, regulation might be more effective, but might take two to three years to implement. A voluntary approach might result in somewhat lower levels of compliance but might be achievable in six to twelve months. What steps would be necessary to implement this alternative? How long would it take? How long would it take to modify the behaviours and achieve the Government's objectives?

h) Is it responsive?

It's possible that ministers and others will reject an alternative that is highly effective, efficient, fair, and speedy. Why? In addition to everything else, the alternative has to be seen to respond to the problem that is being addressed. It should establish that concerns about the problem are legitimate and that there is a need for government involvement.

If the alternative is too complicated to be believed, it won't be. If it doesn't address the contributing behaviours head-on, people will think that the Government isn't serious about fixing the problem. If it isn't tangible, if it doesn't have form, structure, and specifications that define the desired behaviour, it will be viewed as a smoke-screen.

- Does this alternative send a signal that the problem being addressed is real and important?
- Will people be able to understand how it will work and how it will help?
- Will people see it as a direct attack on the problem, or as a side-stepping manoeuvre?
- Does it include a clear specification of the desired behaviours?
- Will there be something tangible (e.g., a set of rules, an institution) that people can point to as evidence of the Government's intervention?

Question 13. What combination of alternatives would work best?

The factors that influence the behaviour you want to modify are likely to be complex and inter-related. Therefore, the best solution will probably be a combination of techniques that work on different aspects of the problem. Most regulatory systems rely on an assortment of techniques to modify behaviour. Activities that promote compliance (e.g., training, public communications, financial assistance) often comprise a major part of a regulatory system. Various forms of requirements are often mixed together in statutes and regulations. For example, licensing systems may control who can provide a product, but they often also incorporate standards and pricing controls.

If you can get what you want without regulation, so much the better. If you can't, perhaps non-regulatory techniques can play a part. What mix of regulatory and non-regulatory instruments would apply the greatest leverage to the factors that influence the behaviours?

Part 2: Factors Affecting Behaviour

Question 7 in Part 1 asked you to identify what external factors are influencing the behaviours you're trying to change. It pointed out that although most of the factors are external to the Government, intervention can have an impact on them. To work out which factors are working for you and which against, try to answer the following eight questions. If you can answer them, you should be able to make an informed decision.

Question 1: Do the people involved understand and accept that there is a problem?

Getting agreement on the problem is a critical first step. Who thinks there is a problem? What exactly do they think the problem is? How serious is it? How much do they want it solved?

It may be in some people's interest to deny that a problem exists. This is probably because they know what you have in mind as the solution and they don't like it. If, however, they know that you're willing to consider a range of alternative solutions, they might be willing to take the first step and acknowledge the problem.

Question 2: Do they understand and acknowledge their contribution to the problem?

Even if people accept that the problem is legitimate, they might not accept that they are helping create it or that their actions could help solve it. Again, some may find it in their interest to deny responsibility. If people don't believe they are part of the problem, they won't see why they should be part of the solution. Ask yourself:

- What behaviours are creating or contributing to the problem?
- Who is engaging in these behaviours?
- Do they recognize that they are behaving this way?
- Do they accept that their behaviour is contributing to the problem?
- Do they accept that changing their behaviour would be a good idea?

Question 3: Do they understand and accept the Government's objectives?

Accepting the problem is one thing; accepting the objective to be served by government intervention is something else. People's willingness to behave the way you want depends on whether they accept the underlying policy objectives. If they believe that the Government is pursuing a valid purpose, they are more likely to do what you want. An important element of any strategy for dealing with a problem, therefore, is to reinforce the underlying social and economic objectives of the government action. Issue advocacy, properly handled, is a valuable and legitimate public policy tool.

- Has the Government clearly stated its policy objective in relation to the problem?
- Has the Government communicated its objective to the appropriate people?
- Do these people clearly understand the Government's objective?
- Do they accept the Government's objective? Do they think it is fair and reasonable? Do they think it can be achieved?

Question 4: Do they understand and accept what you want them to do?

It is critical that the people involved understand and accept what you want them to do. If the behavioural standards are unclear, vague or convoluted, people will have trouble behaving the way you want. Moreover, people won't willingly comply with rules they think are unfair.

- Has the Government clearly stated the standards of behaviour that it believes are necessary to solve the problem?
- Has the Government communicated these standards of behaviour to the appropriate people?
- Do these people understand the standards of behaviour?
- Do they agree that if they comply with these standards, the objective will be achieved and the problem solved?

Question 5: Are they capable of behaving that way?

Some people may not be able to conform to the standards of behaviour, whether they want to or not. In some cases, the technology necessary to achieve a certain standard may not be available. A possibility here is to phase in the specifications in such a way as to force the development of the appropriate technology.

In other cases, the behaviour you want may be possible, but certain firms or individuals may lack the necessary resources, skills, expertise, or information. Again, a common approach is to phase in the behavioural specifications, allowing people time to get their act together.

In both situations, regulators sometimes press ahead with the requirements, but adopt a compliance strategy (usually unwritten) that relies on discretion in enforcement. The strategy may even require consistently turning a blind eye to certain violations of the law by certain people. This is not only unfair, but it could be unconstitutional since it amounts to modifying legislative requirements established by Parliament or by Cabinet.

- Ignoring the cost, is it currently possible for everyone involved to meet the standards of behaviour?
- What will prevent some people from conforming to them?
- Are things likely to change over time? When?

Question 6: Are Economic Considerations Involved?

Economic considerations are often very powerful influences on the behaviour you want to change. The general economic situation provides a starting place for looking at these factors.

- Is the economy booming or in a slump?
- Is unemployment high or low?
- Are profits high or low for products (goods and services) used in or produced by the people whose behaviour you want to change?
- Are things likely to get better or worse?

Moving from the general to the specific, identify and assess economic factors that could directly influence people's willingness to adhere to the standards of behaviour. Place the primary emphasis on the communities directly affected by

the behaviour. Knowing which members of a group are operating under significant business risks can be an important factor in assessing alternatives.

- If those subject to intervention adhered to the standards of behaviour, how would that affect their competitive position vis-à-vis any competitors who were not?
- What if most, but not all, of the competitors fell in line?
- How would conforming affect the competitive position of small businesses vs. bigger businesses? Would they suffer more?
- How would conforming affect the overhead or incremental production costs of individual firms?
- How do people feel about the likelihood and severity of any monetary sanctions that might be imposed under either regulation or some other form of intervention? Do they think the risk is low? Do they think the costs would be offset by potential gains from non-conforming behaviour?
- How do people feel about the likelihood and severity of monetary sanctions imposed by the organizations in which they work (e.g., disciplinary action by managers or owners)? Do they think the risk is low? Do they think the costs would be minimal? Does the corporate culture penalize or reward the contributing behaviour?
- How do people feel about the likelihood and severity of economic costs arising from legal liability that could be triggered by non-conforming behaviour? Do they think the risk is low? Do they think the costs would be minimal?

Question 7: Are social and psychological factors involved?

There is a tendency to focus only on the economic implications of government intervention: How much will this cost? (The cost of regulation impedes success.) How much could be gained? (Economic benefits promote success.) But social and psychological factors may be far more powerful than we think in shaping behaviour. So, it's important to step back and examine the social environment. The behaviours you want could be influenced by changing mores, demographic shifts, or swings in the political climate.

Psychological factors, which operate at the individual level, can also have a significant influence on people's willingness to conform to behavioural norms. The relationship between the people involved and government authorities is an

important related factor. If there is a sense of partnership, or at the very least a sense of trust, people will be more willing to adhere to the standards of behaviour.

- How do people generally feel about the problem? Does anybody care?
- What is the media saying about the problem?
- What are politicians saying about the problem?
- Are there any societal changes that could affect the severity of the problem or the extent to which behaviours would conform to the specifications?
- Is anyone else tackling the problems in other ways?
- Are there other government policies, programs or requirements that could affect the behaviour (e.g., federal, provincial, local, or foreign regulation)?
- Are the culture and values of the community consistent with the behaviour you want?
- Are the culture and values of the people whose behaviour you want to change (e.g., owners, managers, and employees) consistent with the behaviour you want?
- How strong is these people's desire for a favourable image in the community, the media, or their own organization?
- To what extent will they be susceptible to peer or public pressure?
- How do they feel about any sanctions that may exist for non-conforming behaviour? Do they think the sanctions are significant or minor? Why?
- Do they feel it likely that non-conforming behaviour will be detected? Do they think cheaters are likely to get caught? Why?
- Do they feel it likely that there will be a swift and sure response to non-conforming behaviour?
- How do they feel about the likelihood and severity of non-monetary sanctions imposed by their peers, colleagues, competitors (e.g., disciplinary action by managers or owners)? Does the corporate culture penalize or reward the contributing behaviour?

- Do they like to gamble? At what point does the risk of detection and sanction become intolerable for them?

- Do these people trust us? Do we trust them? Why not?

Question 8: Can the Government or other players monitor behaviour, promote the desired behaviour, and sanction non-conforming behaviour?

Even when you make clear the behaviour you want (either in law or through some other mechanism), there is no guarantee that people will behave as desired. Their behaviour will be influenced by whether they think you can monitor their behaviour, promote conforming behaviour, and apply meaningful sanctions for non-conforming behaviour. It's important to be very realistic about this factor, particularly if you are considering regulation. If a problem clearly requires regulation, monitoring and enforcement will be necessary. If you don't intend to monitor and to enforce a requirement, then it's better not to make it a law: make it a suggestion.

The federal Regulatory Policy requires departments to have appropriate compliance policies and to have the capability of putting effective enforcement programs in place. If you are operating in the health or safety field, failure to monitor or enforce could result in large damage awards against the Government for "negligent regulation."

In other words, it's better never to have regulated at all than to have regulated poorly.

- How visible are the behaviours contributing to the problem?

- Is it easy to determine if behaviours conform with the specifications?

- Is it costly?

- Who could monitor the behaviours? How much would it cost? Do they have the resources? Would they be willing to use the resources?

- What types of promotional activities might be required to support the behavioural specifications?

- Who could promote the behaviours? How much would it cost? Do they have the resources? Would they be willing to use them?

- What forms of sanctions might be effective in dealing with instances of non-conforming behaviour?

- Are these forms of sanctions available? Who controls them? Would they be willing to use them? How much would it cost? Do they have the resources? Would they be willing to use them?

Part 3: Alternatives to Regulation

Governments use a variety of instruments to reach policy objectives. This Guide reviews the following well-known (but sometimes unrecognized) alternatives to regulation:

1. Taxation
2. Expenditure
3. Loans and Loan Guarantees
4. User Charges
5. Public Ownership
6. Persuasion
7. Modification of Private Law Rights and Procedures
8. Insurance

1. Taxation

A tax is a financial levy governments impose on a person or corporation. The primary purpose of a tax is to raise revenue. It can, however, be designed to further the government's economic or social policy goals by modifying the economic incentives that influence taxpayers' behaviour. Typically, taxation does this by raising or lowering the cost of engaging in a specific activity. This should result in more or less of the behaviour. Instruments like taxation are particularly useful where economic factors play a key role.

One common technique is the "tax expenditure" – a deduction or credit that reduces the taxes that would otherwise be owing. The right to claim the reduction depends on whether the person is engaging in, or refraining from, a certain behaviour.

The federal government operates at least eight major tax systems: personal income tax; corporate income tax; goods and services tax; customs duties; excise taxes and duties; air transport tax; unemployment insurance; and the Canada Pension Plan.

User charges (e.g., dumping fees) may be viewed as a form of tax. However, they are actually charges for using a facility or consuming a good or service. They are discussed in more detail later on.

Charges such as environmental emissions fees are true taxes (the government does not own or operate the air or water being polluted). They are designed to modify behaviour by imposing a charge on particular activities or sources of an environmental problem. They can be applied to pollution emissions, inputs to a

production process, or final products. Regimes that combine environmental charges and tax incentives are using a "carrot-and-stick" approach.

Fees for regulatory permissions and refundable-deposit regimes are also examples of taxes used to achieve regulatory objectives. Deposit refund schemes, which are specific to the environmental area, are actually refundable taxes. Under this type of regime, a tax is imposed on a product at the point of sale, but is later refunded if the product is returned to a collection system. These economic instruments can be used for products that can be reused or recycled or that create environmental problems if they are not disposed of appropriately.

It is important to distinguish between taxes that are linked to behaviour and other charges that are aimed at recovering costs the government has incurred to provide activities or services that form part of a regulatory program. Cost-recovery charges supplement regulatory schemes and are not subject to the same constitutional restrictions as taxation (see below). They can, however, have important implications for levels of compliance with regulatory requirements.

The federal government's constitutional authority to create taxes is extremely broad. It covers direct taxes (e.g., income taxes), indirect taxes (e.g., customs and excise), and licence fees. However, there are important constitutional limits to this authority where the activities or industry affected would otherwise fall under provincial jurisdiction. The Department of Justice can provide advice on the constitutional implications of taxation instruments. The Department of Finance has responsibility for the substantive aspects of taxation policy.

Examples

The following are examples of tax measures used for regulatory purposes:

- accelerated write-off of capital cost allowance for eligible investments in pollution abatement equipment;
- taxes on alcohol and tobacco products to reduce consumption;
- fuel taxes (carbon content);
- taxes on fertilizers and pesticides;
- taxes on non-returnable and reusable packaging;
- special levies on canned beverages to promote the use of reusable glass containers;

- customs duties on imports to encourage consumption of domestically-produced goods;
- air and water emissions fees (e.g., NOx emissions);
- deposits for reusable and recyclable containers (a refundable tax);
- taxes on tires;
- taxes on car air conditioners;
- graduated taxes on cars linked to fuel economy ratings;
- tax incentives for hiring disadvantaged workers; and
- deposits and refunds for beverages containers, tires, batteries and lubricating oils.

Advantages

Taxation may offer the following advantages; it:

- has the potential to greatly reduce the overall costs to the economy of achieving a particular regulatory goal;
- can be less costly to administer, if piggy-backed on existing tax systems or distribution systems;
- can encourage innovation and competition, reduce government administrative burdens, and provide greater flexibility in policy-setting;
- generates revenue for the Government;
- is potentially more efficient than regulation – it allows and relies on operation of market processes;
- is less intrusive – it allows greater freedom of choice than traditional command-and-control regulation;
- is more transparent – the cost of regulatory benefit (e.g., cleaner air) is directly reflected in the price of products;
- allows flexibility and adaptation of desired behaviours;
- avoids problems of centralized discretionary decision-making;

- can focus clearly on economic determinants of behaviour; and
- can compensate for the lack of resources necessary for people to be able to engage in desired behaviour.

Disadvantages

Taxation may have the following disadvantages:

- it can be a relatively sophisticated tool housed in an already complex system;
- potential claimants may not know about its existence;
- rules governing liability and eligibility can be complex;
- it can be hard to target accurately;
- it may require more precise monitoring than traditional, detailed regulation;
- it may be difficult to determine the magnitude of the tax or tax incentive necessary to modify the behaviours;
- claimants accustomed to receiving tax incentives may develop a sense of entitlement to the benefits, making it difficult to reduce or eliminate them;
- the public may view an indirect method of influencing behaviour as inappropriate;
- administration may be comparatively costly, depending on the number of taxpayers and the need for a new tax system;
- it may be unfair if the target population has very mixed abilities to pay, to take advantage of tax reductions, or to cope with the complexities of the tax system; and
- it can skew the competitive positions of firms in the marketplace.

Note, however, that several of these problems are not unique to taxation.

Factors Favouring Use

The following conditions favour using taxation:

- target behaviour is influenced primarily by economic factors;

- demand for the goods or products affected is highly elastic, accentuating the price modification effects of the tax and, hopefully, the impact on production behaviour;
- there would be fewer tax paying units, reducing the costs of collection and monitoring;
- target behaviour can be linked to exchange transactions, facilitating collection, monitoring, and enforcement;
- there are "gates" or natural control points in the affected activities (facilitates collection, monitoring, and enforcement);
- co-operation is expected from importers, producers, distributors, and retailers;
- targeted individuals already have potential tax liability and ability to pay;
- liability to pay tax can be precisely defined in the legislation;
- targets (taxpayers or products) for new or increased taxes can be easily and precisely identified, facilitating collection, monitoring, and enforcement;
- behaviour requires expenditures on specific, definable goods or services;
- eligibility for incentives (tax credits or deductions) can be easily demonstrated by claimants and verified by government authorities;
- targeted taxpayers are relatively sophisticated;
- targets for tax incentive have sufficient level of tax liability to make reduction meaningful.

Contraindicators

The following conditions work against using taxation:

- target behaviour is determined primarily by social or psychological factors;
- target behaviour is not engaged in by players who would be affected by imposing taxes of extension or tax incentives;
- products of affected industries are subject to provincial regulatory control (potential constitutional difficulties);

- rules necessary to ensure proper targeting would significantly complicate tax system, increasing the cost of administration and compliance, detracting from the transparency and perceived fairness of the tax system, and favouring large, more sophisticated taxpayers;

- demand for the goods or products affected is highly elastic,increasing the general economic efficiency losses resulting from the tax; and

- target activities are highly diffused throughout the economy, complicating monitoring and enforcement.

Program Delivery Implications

If you are considering taxation as a method of influencing behaviour, you will want to keep the following points in mind:

- you must target the levy or tax reduction precisely to get maximum impact on behaviour;

- creating a new tax system is costly;

- you need to find efficient ways of collecting the tax or providing the tax reduction;

- you need to be able to verify and monitor the taxpayer's liability and eligibility;

- you will have to be capable of effective audit and enforcement;

- explanatory materials may be required to explain the tax measures; and

- new or existing forms will have to be prepared.

2. Expenditure

An expenditure is a transfer of a benefit by government (or an agent of government) to people in the private sector or to other levels of government. Typically, an expenditure is a monetary grant or contribution. However, benefits might also be provided in kind (e.g., supplying information, seconding skilled personnel, providing materiel).

Expenditure can elicit a more frequent occurrence of a desired behaviour by reducing the cost of engaging in that behaviour. Consequently, if you choose expenditure as a regulatory alternative, the benefit will have to be directed to the people whose behaviour you want to modify or to others with whom they deal. This approach would be most effective where economic factors play a major role in influencing the behaviour.

Strategic procurement policy is a variant on the simple transfer of benefits. Here, government uses its purchasing power to require that suppliers conform with certain specifications relating to conduct or product attributes. The impact on behaviour will be greater where the government is such an important customer that suppliers redesign products, and change business practices and production processes to keep the business.

This technique has maximum impact where it is difficult for the supplier to differentiate between the government and other customers (i.e., where there is a spill-over effect). For example, if economies of scale dictate undifferentiated production runs, then government-mandated specifications would also be applied to products produced for other customers. Similarly, an employment equity program established by a company so that it can qualify for federal contracts would not be suspended while it is working on contracts for private sector or provincial government customers.

Examples

The following are examples of expenditure used for regulatory purposes:

- grants to reimburse farmers or fishery workers for losses suffered through crop failure;
- grants to companies for training and hiring disadvantaged workers;
- government purchase of commodities to stabilize prices and establish base levels of return for producers;

- the granting of licences (with low royalties) for government-patented processes or products (e.g., anti-lock braking systems) that facilitate desired behaviour or production of desired products;
- grants for purchasing pollution abatement equipment;
- grants to homeowners for installing insulation;
- rebates for purchasing energy-efficient light bulbs and appliances;
- grants for upgrading safety equipment;
- grants or contributions to facilitate voluntary action (e.g., subsidizing the development of consensus standards or the setting of international standards);
- grants to cover the costs of switching to new crops or varieties of existing crops;
- grants to supplement income shortfalls for producers in the agricultural and fisheries sectors;
- buy-outs of current licence-holders to reduce production capacity in the fisheries and transport sectors;
- grants for constructing sewage treatment facilities;
- grants to transport carriers to provide service on unprofitable routes;
- reduced mailing rates for pre-sorted bulk mail;
- procurement policies requiring major suppliers to have employment equity programs or to use environmentally-friendly production methods, or the specification of product standards; and
- grants to those involved in monitoring behaviours and taking social, economic or legal action to modify the activities (e.g., funding for "Court Challenges" program; funding to environmental and consumer groups for advocacy functions).

Advantages

Expenditure may offer the following advantages; it:

- compensates for the lack of resources necessary for people to be able to engage in the desired behaviour;
- can be precisely targeted to people and corporations whose behaviour needs to change;
- is potentially more efficient than regulation – allows and relies on the operation of market processes, avoiding economic allocative efficiency losses normally attributable to regulatory controls;
- is less intrusive – allows greater freedom of choice than traditional command-and-control regulation;
- allows flexibility and adaptation of desired behaviours;
- avoids problems of centralized discretionary decision-making; and
- can focus on economic determinants of behaviour.

Disadvantages

Expenditure may have the following disadvantages:

- expenditures directly increase the government deficit;
- it may be difficult to determine the magnitude of the benefit necessary to modify the behaviours;
- recipients may develop a sense of entitlement to the benefits, making it difficult to reduce or eliminate them;
- the public may view this indirect method of influencing behaviour as inappropriate, as a government giveaway;
- potential claimants may not know that the expenditure programs exist;
- you have to target the benefit precisely to get the maximum impact on behaviour;
- rules governing eligibility can be complex and can amount to de facto regulation;

- administration may be costly, requiring screening applicants, renegotiating agreements, monitoring performance, processing payments, and auditing; and

- it may be unfair -- variation in take-up can skew the competitive positions of firms in the marketplace if the target population has varied abilities to cope with the complexities of the process (larger, more sophisticated, better-connected firms may benefit more).

Factors Favouring Use

The following conditions favour using expenditure:

- sufficient funding or in-kind benefits are available;

- target behaviour is influenced primarily by economic factors;

- the inability of players to comply with behavioural requirements is partly due to lack of resources;

- the number of easily-identifiable potential beneficiaries is small, reducing the costs of administration and increasing coverage;

- eligibility can be precisely defined (e.g., behaviour requires expenditures on specific, definable goods or services);

- eligibility for incentives (tax credits or deductions) can be easily demonstrated by claimants and verified by government authorities;

- target beneficiaries are relatively sophisticated;

- compliance is easily discernible, facilitating monitoring; and

- compliance requires discrete steps, allowing progress payments contingent on evidence of compliance.

Contraindicators

The following conditions work against using expenditure:

- target behaviour is determined primarily by social or psychological factors;

- those engaging in the target behaviour would not be affected by the availability of resources provided through expenditure;

- funding or in-kind benefits are insufficient to accomplish behavioural changes;

- the rules necessary to ensure proper targeting of benefits would be very complex, increasing the cost of administration and compliance; detracting from the transparency and perceived fairness of expenditure programs; and favouring larger, more sophisticated firms; and

- confirming compliance with contractual requirements would be difficult.

Program Delivery Implications

If you are considering expenditure as a method of influencing behaviour, you will want to keep the following points in mind:

- you will need to carefully define the requirements governing eligibility;

- you will need to develop an approval process, a standard agreement, a program to verify compliance, an accounting system, a payment control system, and an audit function;

- you will require legal assistance for program administration and may require technical assistance for processing applications and verifying claimants' eligibility for payments; and

- you will need a communications strategy to ensure that prospective applicants learn about the program and its requirements.

3. Loans and Loan Guarantees

Loans and loan guarantees can also be used as financial incentives for desired behaviour. In a loan, the government transfers money to the borrower, who is subject to contractual requirements that will bring about the desired behavioural changes. Loans may be interest-bearing or interest free, and repayment terms can vary significantly, depending on the nature of the transaction. In some cases, the government might transfer possession of tangible assets (e.g., equipment) instead of money.

With loan guarantees, the government does not itself transfer money, but provides contractual assurance to third-party lenders that it will make good on a loan (up to a specified maximum) if the borrower defaults. If the government is required to make good on its guarantee, there is probably little likelihood of recovering from the borrower. Thus, a loan guarantee is best thought of as a contingent liability on the government's books, whereas a loan is an asset.

Loan guarantees are a useful way of levering funds from capital markets for the benefit of a firm that would otherwise be denied financing or would be obliged to pay uneconomical interest rates. Both loans and loan guarantees can help elicit a desired behaviour by reducing the cost of engaging in an activity. These instruments will be most effective where economic factors (e.g., sufficient resources) play a major role.

Examples

The following are examples of loans or loan guarantees used for regulatory purposes:

- loans or loan guarantees for purchasing and installing pollution abatement equipment;
- loans or loan guarantees for retro-fitting workplaces to meet new safety and health standards;
- loans or loan guarantees for purchasing and installing upgraded equipment;
- loans or loan guarantees to defray the cost of training and educating employees;
- loans or loan guarantees to cover initial research and development costs of new technology and products; and
- loans or loan guarantees to cover the cost of switching to new crops or varieties of existing crops.

Advantages

Loans and loan guarantees may offer the following advantages; they:

- help compensate for the lack of resources necessary for people to be able to engage in the desired behaviour;
- do not contribute (as much) to increasing the Government's deficit;
- if the loan is interest-bearing, can produce revenue for the Government;
- can be precisely targeted to people and corporations whose behaviour needs to change;
- are potentially more efficient than regulation -- allow and rely on the operation of market processes, avoiding the economic allocative efficiency losses normally attributable to regulatory controls;
- are less intrusive -- allow greater freedom of choice than traditional command-and-control regulation;
- allow flexibility and adaptation of desired behaviours;
- avoid the problems of centralized discretionary decision-making; and
- can focus on economic determinants of behaviour.

Disadvantages

Loans and loan guarantees may have the following disadvantages:

- they contribute somewhat to increasing the Government's deficit and contingent liabilities;
- they may be more complex to administer than expenditure programs, requiring screening applicants for eligibility and credit-worthiness, negotiating loan agreements, monitoring performance, processing payments, collection, and audit);
- it may be difficult to determine the total amount of loans necessary to modify the behaviour;
- the public may view this indirect method of influencing behaviour as inappropriate;

- potential borrowers may not know the loan programs exist;
- you have to target the benefit precisely to get the maximum impact on behaviour;
- rules governing eligibility can be complex and can amount to de facto regulation; and
- it may be unfair -- variation in the take-up of loans can skew the competitive positions of firms in the marketplace if the target population has varied abilities to cope with the complexities of the process (larger, more sophisticated, better-connected firms may benefit more).

Factors Favouring Use

The following conditions favour using loans or loan guarantees:

- sufficient loan funds (or in-kind benefits) are available;
- target behaviour is influenced primarily by economic factors;
- inability of players to comply with behavioural requirements is partly due to lack of resources;
- private lenders are unwilling to provide loans at competitive rates to target borrowers for specified purposes;
- the number of easily identifiable potential beneficiaries is small, reducing the cost of administration and increasing coverage;
- eligibility can be precisely defined (i.e., behaviour requires expenditures on specific, definable goods or services);
- eligibility for loans or loan guarantees can be easily demonstrated by claimants and verified by government authorities;
- target beneficiaries are relatively sophisticated;
- compliance is easily discernible, facilitating monitoring;
- compliance requires discrete steps, allowing staged loan advances contingent on evidence of compliance); and
- potential borrowers are known to be credit-worthy.

Contraindicators

The following conditions work against using loans or loan guarantees:

- target behaviour is determined primarily by social or psychological factors;
- those engaging in the target behaviour would not be affected by the availability of resources provided through loans or loan guarantees;
- private lenders would be willing to make loans at competitive rates to target borrowers for specified purposes;
- potential borrowers are known to be on the verge of insolvency or are in declining industries;
- pool of funds or in-kind benefits are insufficient to accomplish behavioural changes;
- rules necessary to ensure proper targeting of loans or guarantees would be very complex, increasing the cost of administration and compliance; detracting from the transparency and perceived fairness of the loan program; and favouring larger, more sophisticated firms; and
- confirming compliance with loan agreement requirements would be difficult.

Program Delivery Implications

If you are considering loans or loan guarantees as a method of influencing behaviour, you will want to keep the following points in mind:

- you will need to carefully define the requirements governing eligibility;
- you will need to develop an approval process, a standard loan agreement, a program to verify compliance, and accounting system, a payment control system, a collection system, and an audit function;
- you will require legal assistance for program administration and may require technical assistance for processing loan requests and verifying applicants' eligibility for payments; and
- you will need a communications strategy to ensure that prospective applicants learn of the loan program and its requirements.

4. User Charges

User charges are fees imposed for using or consuming collective goods, facilities or services. User charges (e.g., dumping fees) have been used extensively in the environmental area. They are designed to modify behaviour by raising or lowering the cost of engaging in a specific activity (e.g., using certain production inputs or methods of production). In theory, the charges should be set so that the price of the goods or services reflects their true value – then the goods or services will not be over-utilized.

To be successful, charges must be applied either in situations where there is a monopoly or in conjunction with regulatory regimes that force people to deal with the chosen suppliers. A good example of a monopolistic situation is water service which is available only from local utilities; there are no economically viable alternatives, at least in most urban areas. Examples of the second situation are municipal sewage services and garbage collection. There are viable alternatives (e.g., septic tanks, dumping garbage at night in the city park), but these are controlled through regulation. When the alternatives are perceived to be more expensive than the service for which a user fee is charged (e.g., cost of purchasing and installing a septic tank vs. the payment for sewage service), there will be less need for regulatory controls.

It is important to distinguish between charges that are applied for consuming collective goods, services, or facilities and charges to recover costs the Government has incurred to provide activities or services that form part of a regulatory program. Cost-recovery charges applied to elements of a regulatory program can increase the regulatory burden and adversely affect levels of compliance. Whether cost-recovery charges are effective or not depends on the levels of the charges, the regulatees' ability to pay, and the impact of other factors affecting compliance.

Examples

The following are examples of user charges used for regulatory purposes:

- user fees for water consumption
- user fees for waste water treatment
- user fees for sewage treatment
- user fees for collection of solid waste
- user fees for disposal of solid waste (landfill)
- user fees for collection of toxic waste
- user fees for storage of toxic waste
- user fees for disposal of toxic waste and
- differential hydro rates that penalize increased consumption

Advantages

User charges may offer the following advantages; they:

- have the potential to reduce the overall cost to the economy of achieving a particular regulatory goal;
- provide the flexibility to increase or decrease the desired behaviour by manipulating price;
- can encourage innovation in developing alternatives to facilities, services, and production technologies;
- generate revenues for the Government;
- are potentially more efficient than regulation -- they rely on the operation of market processes to determine level of consumption or use;
- are less intrusive -- allow greater freedom of choice than traditional command-and-control regulation;
- avoid problems of centralized discretionary decision-making;
- focus clearly on economic determinants of behaviour; and
- can compensate for the lack of resources necessary for people to be able to engage in the desired behaviour by setting subsidized price levels.

Disadvantages

User charges may have the following disadvantages; they:

- could increase the need for regulatory controls over substitute behaviours;
- require monitoring, control, charging, collection, and maintenance systems;
- may require significant investment in plant and infrastructure;
- may generate legal liabilities for government (e.g., failure of service, improper containment);
- may be unfair, if the target population has very mixed abilities to pay; and
- can skew the competitive positions of firms in the marketplace.

Factors Favouring Use

The following conditions favour user charges:

- target behaviour is influenced primarily by economic factors;
- government has a monopoly (or there are only a few suppliers) for supply of the relevant goods, services, or facilities;
- there are no viable alternatives or the user of alternatives can be easily detected;
- there are "gates" or natural control points in the affected activities, facilitating collection and monitoring); and
- target individuals have ability to pay.

Contraindicators

The following conditions work against user charges:

- target behaviour is determined primarily by social or psychological factors; and
- lower-cost alternatives are readily available and are not easily monitored or controlled.

Program Delivery Implications

If you are considering user charges as a method of influencing behaviour, you will want to keep the following points in mind:

- they may require substantial investment in plant and premises (including the search for facilities, planning, maintenance, and replacement); and
- this is a business -- it will have to be run efficiently and be responsive to customer demands. History shows that, in the long run, people prefer choice.

5. Public Ownership

Governments in Canada have frequently used ownership of companies in "sensitive" industries to achieve public policy goals. Public ownership can be used to accomplish a wide range of public policy objectives, e.g., to control natural monopolies; to promote nation-building and community development; to moderate the effects of economic transitions and stabilize income; to ensure capital funds are available for specific purposes; to promote national security and assure the supply of specific goods and services; to establish competition; and to control externalities (both negative and positive) of market activities. Often, the companies are dominant in their markets, which allows them (under government direction) to influence market behaviour (both production and consumption).

Public ownership can take a variety of forms. The most common is the Crown corporation, established under special legislation. However, the government can also carry ownership of companies established under the generic corporations legislation. In either case, the government may own part or all of the shares.

The government is involved only minimally in the day-to-day operation of the firm, if at all. It exercises more significant control over senior-level appointments, corporate policies, strategic planning and, especially, financing. One of Canada's unique contributions to the world of regulation has been to combine the techniques of public ownership with regulatory control over the industry in question. This allows two avenues of control and provides greater flexibility for implementing public policy objectives.

Whether of not ownership is used as an instrument of public policy depends a great deal on the prevailing philosophy about the role of government in the private sector. At the time this guide was written, public enterprise was not favoured, particularly where the firms would be operating in competitive markets.

Examples

Public ownership has been used, in part for "regulatory" purposes, in the following areas:

- agricultural loans
- agricultural insurance
- sale of agricultural products (marketing boards)
- automobile insurance
- film production and financing
- lotteries and other forms of gambling
- sale of alcoholic beverages

- production of currency
- postal service
- rail and air transport
- broadcasting
- petroleum exploration, refining, and marketing
- atomic energy applications
- electronic power generation and distribution
- water distribution and
- telecommunications (including satellite services)

Advantages

Public ownership may offer the following advantages:

- it is potentially more efficient than regulation – and avoids imposing broad-based regulatory requirements on the private sector;

- it can ensure virtually 100 percent compliance with behavioural specifications if the Crown corporation enjoys a monopoly or is so dominant that competitors must follow its lead;

- cross-subsidization through pricing policies allows income redistribution to be accomplished less visibly;

- it can compensate for the lack of resources necessary for people to engage in the desired behaviour;

- it facilitates more efficient and more informed policy development and decision-making by ensuring there is better knowledge and understanding of relevant markets and industries (market participants know more than regulators), and by internalizing the process of dealing with multiple policy objectives; and

- it can eliminate or significantly reduce the cost of rule-making, monitoring and promoting compliance, and enforcement.

Disadvantages

Public ownership may have the following disadvantages:

- public ownership of the dominant firm (particularly when combined with economic regulatory controls over entry and price) can significantly impair economic efficiency and impede the dynamic adjustment of affected markets by perpetuating dominance; insulating the firm from competitive pressures; hindering new entrants; and blunting the pressures for cost-efficiency and

innovation which can lead to the adoption of new technology, and the development of new products and new production, distribution and marketing methods);

- there is a potential lack of responsiveness to customer demands;
- it may be unfair, should the Government become involved as a competitor in a marketplace where there is the potential for workable competition;
- there are problems of political control and accountability;
- there is the potential to increase the Government's deficit or contingent liabilities;
- the more the Crown corporation operates in an arm's-length relationship with the Government, the more difficult and costly it is to monitor the effectiveness;
- remuneration levels for officers and employees that significantly exceed those in government departments and agencies (not to mention the private sector) may be seen as being unfair.

Factors Favouring Use

The following conditions favour using public ownership:

- a publicly owned firm must be sufficiently dominant in the relevant markets to influence the behaviour of other participants (i.e., consumers and competitors);
- the Government is willing to use this type of instrument;
- the Government is a major purchaser of the target goods or services;
- it is difficult to develop exact, legally-enforceable specifications for the product;
- there is a need to continually control behaviour at the micro-management level;
- there is a need for low-profile redistribution of income;
- the target behaviour is influenced by economic, social and psychological factors;

- people are unable to comply with behavioural requirements due partly lack of resources; and

- there is a need for a constant, visible symbol of the Government's commitment to certain values (responsiveness).

Note that, although market dominance will promote the effectiveness of this instrument, it also constitutes a major risk factor for economic efficiency (see below).

Contraindicators

The following conditions work against using public ownership:

- relevant markets are competitive, negating the ability of a Crown corporation to significantly influence market behaviour and provide superior information to the Government for policy purposes; and

- the Government opposes expanded use of public ownership.

Program Delivery Implications

If you are considering public ownership as a method of influencing behaviour, you will want to keep the following points in mind:

- it may require substantial investment in plant and premises (including a search for facilities, planning, maintenance, and replacement);

- this is a business -- it should be run efficiently and be responsive to customer demands;

- it will require appropriate corporate ownership infrastructure;

- it may increase the Government's deficit or contingent liabilities (loan guarantees are a common method of facilitating financing for Crown corporations); and

- it will require appropriate political and parliamentary control, monitoring and accountability arrangements (including external audit).

6. Persuasion (promoting voluntary action)

Persuasion, or promoting voluntary action, is a very important alternative to regulatory intervention. Under this instrument, the government does not make legally binding rules that specify the desired behaviour. Instead, it attempts to achieve its policy objectives by persuading the appropriate players to modify their behaviour voluntarily. Research on regulatory compliance and practical experience have shown that non-compliance often results from ignorance. The players involved may not understand or appreciate the problem being addressed, the rationale behind the behavioural requirement, the desired behaviour, or how to achieve the behaviour. Fear of sanctions by the state, which is the critical difference between regulation (mandatory rules) and voluntary action, is generally less important in determining behaviour than ensuring people understand why the behaviour is required.

The Government is increasingly promoting voluntary action as part of its general orientation toward solving problems using "partnership" approaches.

This guide makes a basic distinction between unstructured voluntary action and structured voluntary action, which are treated separately below. However, both forms share some common advantages and disadvantages.

Unstructured Voluntary Action

With unstructured voluntary action, the players involved (including the government) do not attempt to specify or formalize behavioural requirements. There is no attempt to monitor or sanction behaviour. Instead, advertising and provision of training and advisory services are typical elements. This instrument may be particularly useful, therefore, in areas where sociological and psychological factors have a greater impact on behaviours than economic factors. Unstructured voluntary action may also be effective where knowledge, attitudes and general approaches to problems are more important in achieving behavioural changes than requiring strict compliance with specific rules.

Examples

Unstructured voluntary action has been used for regulatory purposes in the following cases:

- anti-drinking and driving advertising and education campaigns
- environmental awareness programs
- "Buy Canadian" promotional campaigns and
- promotion of multiculturalism and anti-racism campaigns

Advantages

Unstructured voluntary action may offer the following advantages; it:

- may have fast results;
- may provide greater flexibility and responsiveness to changing circumstances, thus promoting economic efficiency and preserving the capability for dynamic adjustments to changing market conditions and technological advances;
- preserves incentives for innovation;
- minimizes the government expenditures required for rule-making, monitoring and promotion, and eliminates enforcement costs entirely;
- is less intrusive, and allows greater freedom of choice than command-and-control regulation;
- avoids problems of centralized discretionary decision-making.

Disadvantages

Unstructured voluntary action may have the following disadvantages:

- it may take longer to achieve change;
- it may cost more to monitor success (may not have information that would have been available through the use of such instruments as taxation or regulation); and
- some of the players involved may not consider this approach to be responsive enough.

Factors Favouring Use

The following conditions favour promoting unstructured voluntary action:

- behaviours are determined primarily by social or psychological factors;
- knowledge, attitudes and general approaches to problems are more important in achieving behavioural changes than strict compliance with specific rules;
- it's not feasible to articulate specific rules;

- it's not possible to make rules for every conceivable hazard or potential problem;
- other factors would reinforce pressures for behavioural change;
- opinion leaders favour change and are willing to participate in (and perhaps support) a promotional campaign; and
- the media is interested in the issues and objectives of the promotional campaign.

Contraindicators

The following conditions work against using unstructured voluntary action:

- behaviours are determined primarily by economic factors;
- the players involved want regulatory intervention (e.g., to maintain a "level playing field");
- specific behaviours are required, and they can be precisely defined; and
- resources are insufficient to execute a promotional campaign properly.

Program Delivery Implications

If you are considering promoting unstructured voluntary action as a method of influencing behaviour, you will want to keep the following points in mind:

- a campaign strategy and workplan will be required;
- substantial financial resources may be required (e.g., for opinion surveys, development of materials, advertising budget, media relations work);
- specialized skills will be required (e.g., opinion polling, market research, design and delivery of training, media relations, writing, editing, translation, distribution, placement of advertising); and
- you will probably have to sustain activities for an extended period of time -- the more significant the behavioural change desired, the longer the promotional effort.

Structured Voluntary Action: Codes, Guidelines and Voluntary Standards

Voluntary action can be structured through instruments such as codes, guidelines and voluntary standards. Although the behavioural requirements are not made mandatory under this alternative, specific rules are developed.

There are no precise definitions that can be used to distinguish between these instruments. The term "code" can be used to refer to both mandatory and voluntary requirements. In the latter case, it is often applied to more general specifications of behaviour (e.g., "Code of Conduct," "Code of Professional Ethics). Guidelines can be more detailed, but may still deal with broad behavioural requirements (e.g., "Truth in Advertising" guidelines, "Environmental Audit" guidelines).

Voluntary Standards vs. Consensus Standards

"Voluntary standards" is a term that is usually applied to highly detailed specifications. While there is considerable confusion about this instrument, the first thing to remember is that voluntary standards are not the same as consensus standards. Voluntary standards are specifications and rules that can be made by anyone.

Consensus standards, on the other hand, are developed through a consensus process. Typically, a standards-writing organization such as CSA or CGSB will bring the players together and shepherd the process. It is entirely possible, however, for the government to act as the facilitator.

Voluntary standards can be either voluntary or mandatory. Likewise, consensus standards can be either voluntary or mandatory, although many of them are referred to in federal and provincial regulations.

Voluntary Standards vs. Self-Regulation

There are clear differences between codes, guidelines, and voluntary standards on the one hand, and self-regulation on the other. Self-regulation is often used by the provinces for certain occupations (e.g., lawyers, doctors, engineers, hairdressers, financial counsellors). In these cases, the legislature delegates regulatory authority to an organization representing members practising that occupation. The organization makes rules, levies charges, and applies discipline -- and these have the same force and legal authority as if they were carried out by the government itself. There is nothing voluntary about self-regulation.

Codes and guidelines also specify rules and standards of conduct. The key differences are that they have no legal authority and compliance is not mandatory. In theory, compliance is achieved because the players involved find it in their self-interest to obey the (non-binding) rules voluntarily. Of course, the same holds true for most regulatory programs -- firms find it in their self-interest to obey the (binding) rules voluntarily.

Paradoxically, for businesses, a major problem with codes, guidelines and voluntary standards is that there are no effective sanctions or enforcement mechanisms. Put yourself in their position. Your primary goal is to keep your company healthy and in business. But, if you comply, it will cost you more: your prices will have to go up or your profits will have to drop. You are willing to comply voluntarily, provided your competitors do the same. You can be hurt badly by cheaters. You need, and deserve, a "level playing field". If there is no way to stop cheaters, you are simply giving unscrupulous competitors a chance to put your employees' jobs at risk and put you out of business.

So, why do firms comply with codes, guidelines, and voluntary standards? One reason might be their concern about their reputation if it became known that they had violated the rules. Peer pressure may also play an important role.

Codes, guidelines, and voluntary standards can be used where the government is not active in an area. They can also be used to elaborate requirements in an area already covered by regulations. Moreover, as reforms have raised the cost of regulating, regulators are turning to lower-cost substitutes: they are discovering the benefits of bypassing the regulatory approvals system.

In some cases, codes and guidelines are in fact not very "voluntary". Sometimes departments make it clear that if compliance with codes or guidelines is not satisfactory, the rules will become binding regulations. Some codes and guidelines appear to have been born as draft regulations. Some, particularly those that apply to federal institutions and were authorized by a minister or by Cabinet, may actually be legally binding.

Examples

Examples of codes, guidelines, and voluntary standards developed with the involvement of federal departments include:

- electronic funds transfer service code
- various environmental protection codes and
- advertising code of ethics

Advantages

Structured voluntary action through codes, guidelines or standards may have the following advantages:

- it recognizes the practical limits to the Government's ability to solve problems through detailed intervention;
- it can provide greater speed, responsiveness and flexibility (it may be preferable in markets characterized by rapid product change since voluntary standards can be established and altered more quickly than government regulations);
- it is not subject to constitutional and other legal limitations (it can be used to set national standards and avoid balkanization);
- it is not subject to legal drafting conventions;
- it can suggest, explain, justify, and elaborate;
- it can address areas that are difficult to regulate, such as ethical behaviour;
- it may reduce the cost to government of developing, promoting, monitoring, and enforcing behavioural requirements;
- it can lead to the production of products that are interchangeable and compatible, thus increasing the number of sources of supply, promoting competition, reducing risk, cutting down the size and cost of inventories, raising worker productivity, and enhancing the economies of large-scale operations;
- rationalizing products may lead to increased efficiency through economies of scale in production, inventories, and consumption;
- it may lower the risk of product failure;
- users may perceive a lower risk of product failure;
- it may foster the entry of new products into the marketplace, expand demand, and facilitate international trade;
- it may substantially reduce the amount of information and evaluation required in making a purchase decision, compensating for inequality in the information available to buyers and sellers;

- it may lower costs and increase economic efficiency by improving the rationalization, interchangeability and compatibility of products, and may correct market failure due to production or consumption externalities and the lack of mechanisms for shifting and reducing risk; and

- it may make it harder for firms to differentiate their products and may increase competition based on price.

Note that many of these advantages apply equally to mandatory standards.

Disadvantages

Structured voluntary action, such as codes, guidelines, and standards, can have the following problems:

- it may provide the opportunity and a vehicle for collusive, anti-competitive arrangements among rivals;

- it may be created and administered in a way that favours certain interests (e.g., dominant firms, domestic producers), depending on the relative balance of power among the players involved;

- it may result in behavioural requirements that will not solve the problem that prompted the Government's action;

- it may reduce product diversity;

- it may enable firms to engage in tied selling which would extend their monopoly in one product into the market for a complementary product;

- it may impede innovation and entry of new products into the marketplace;

- it may hinder the development and application of new technologies;

- it may create barriers to trade;

- it may result in lower levels of conforming behaviour;

- the inability to punish cheating would penalize those who voluntarily comply and, if non-compliance continued, would ultimately erode the instrument's effectiveness;

- it may be unfair -- standards may lower costs more for small firms than for larger firms.

Note that many problems apply equally to mandatory standards.

Factors Favouring Use

Codes, guidelines, and voluntary standards may be viable options under the following conditions:

- products or services are complex, relatively costly, and infrequently purchased and have attributes not easily discernible by prospective purchasers (information asymmetry);
- markets are characterized by rapid changes in products;
- quality standards are particularly useful in markets with:
  - greater sensitivity to variations in quality
  - little elasticity of demand
  - low marginal cost of providing quality, and
  - not much value placed on poor quality service;
- the industry is organized or controlled well enough by its own members to ensure reasonable adherence to the behavioural specifications;
- the small number of firms involved means that they can be easily identified and can agree individually to adhere to behavioural specifications;
- there is an organization, whose members represent all or nearly all of the firms in the industry, that will take responsibility for promoting the behavioural specifications;
- all affected interests (particularly consumers) are able to participate in developing the behavioural specifications;
- the players involved understand the risks involved in continuing the behaviours contributing to the problem (e.g., health, safety, or environmental areas);
- there is significant potential legal liability for the consequences of the contributing behaviours;
- the players involved perceive the Government to be willing to use regulatory intervention if voluntary action fails;
- industry members and consumers can easily detect cheating;

- independent third-party monitoring and certification programs are available to support the specifications (e.g., CSA, CGSB, UL or ISO 9000);

- competitors and consumers can apply non-legal sanctions (e.g., withdrawing co-operation in other areas such as research; purchasing products of conforming competitors) to punish cheating; and

- in general, if the industry is ripe for collusive behaviour, it is ready for voluntary arrangements.

Contraindicators

Unstructured voluntary action may be neither viable nor desirable in the following circumstances:

- there are many competitors with divergent interests who must agree and modify their behaviour;

- there is significant imbalance in the power of the various players involved to influence the content and application of the specifications;

- imported products account for a substantial portion of the market (it is unlikely that foreign producers will adhere to Canadian voluntary standards);

- there is significant export potential and there are no international standards or comparable standards in trading partner jurisdictions, putting Canadian producers at a competitive disadvantage;

- prospective purchasers can easily detect and evaluate product attributes (less information asymmetry means less justification for product standards); and

- consumers purchase affected products frequently and repeatedly, allowing them to vote with their dollars.

Program Delivery Implications

If you are considering promoting structured voluntary action such as codes, guidelines or standards, you will want to keep the following points in mind:

- to be successful as voluntary measures, codes, guidelines, and standards should be developed through a process that involves all the players involved;

- the Government or other players involved may have to provide various kinds of assistance to ensure that consumer, environmental, and similar interests can participate fully and effectively;

- the Government has a strong interest in the content and application of the voluntary specifications to ensure, for example, that standards do not create unwanted international trade barriers; the Government should probably participate in developing the specifications and monitoring compliance.

7. Modification of Private Law Rights and Procedures

Another alternative to regulation is to create new substantive legal rights of action (e.g., tort, fraud, unconscionable contracts, restitution, fiduciary obligations) or to modify procedural law. Adjusting procedural requirements can also create significant incentives.

There are constitutional limits on the scope the federal government has in this area, however. The provinces generally have exclusive jurisdiction over civil law matters, including contract and tort. The provinces also have jurisdiction over civil procedure. The federal government can, however, seek provincial co-operation in making changes to private law rights and procedures. It can also create rights of action, if they are supplementary to regulatory regimes otherwise falling under federal jurisdiction.

Examples

The following are examples of modifications of substantive or procedural private law:

- creating new duties allowing private civil actions for tort, breach of contract, harm resulting from using a product, breach of fiduciary obligations;
- modifying the law on "nuisance" and "trespass" to make it easier for people to recover for losses suffered through environmental pollution;
- changing civil procedures to facilitate class action proceedings;
- altering "standing" rules to allow a broader range of interested parties to take legal action;
- offering intervenor funding or cost awards;
- providing for civil right of action for firms that have been subject to losses arising from anti-competitive activities such as predatory pricing (Competition Act);
- building in civil right of action for parties to recover the cost of environmental clean-ups.

Advantages

Modifying private law rights and procedures may offer the following advantages; it:

- is less intrusive -- allows greater freedom of choice than traditional command-and-control regulation;
- allows greater flexibility and adaptation of desired behaviours; and
- avoids problems of centralized discretionary decision-making;

Disadvantages

Modifying private law rights and procedures may have the following problems:

- it can add a relatively sophisticated tool to an already complex system;
- it may be unfair -- some parties may lack sufficient resources to pursue private lawsuits;
- it may not be economically justifiable for some parties to pursue cases (e.g., where the amount of money at issue in a single case is small relative to the cost of the legal proceedings);
- the adversarial model employed in traditional litigation may not be the most appropriate or effective process for resolving conflicts and modifying behaviour;
- decisions in specific cases may not have broader behavioural impact;
- procedural changes may not fully compensate for the costliness and slowness of private actions in the legal system;
- the parties involved may not consider this approach to be responsive enough;
- it may direct technical issues to courts not qualified to make such determinations;
- the outcome of individual cases is uncertain;
- the general impact on behaviour may be slow;
- it may develop differently in various jurisdictions;

- it can be hard to target accurately.

Factors Favouring Use

The following conditions favour modifying private law rights and procedures:

- the target beneficiaries of change are relatively sophisticated;
- new or modified rights and obligations can be precisely defined in legislation;
- the target behaviour is influenced primarily by economic factors;
- the target beneficiaries have sufficient resources to pursue private legal actions;
- the amount of money involved in each action is sufficient to warrant private legal action by an individual or a firm ; and
- factual issues (e.g., technical or scientific aspects of behaviour or product performance) are not highly detailed or complex.

Contraindicators

The following conditions work against modifying private law rights and procedures:

- the target behaviour is determined primarily by social or psychological factors; and
- the amount of money involved in each action would be less than litigants could potentially recover.

Program Delivery Implications

If you are considering modifying private law rights and procedures as a method of influencing behaviour, you will want to keep the following points in mind:

- jurisdictional limitations on federal authority severely restrict using this instrument;
- using this method may make it more difficult for the Government to monitor how much behaviour has changed and to what extent policy objectives have

been achieved, due to lack of information that would be available through regulatory or tax systems;

- it may have workload and resource implications for provincial court systems;
- it will require a communications campaign targeted at legal practitioners, relevant business interests, and intended beneficiaries; and
- it may require government funding to ensure that intended beneficiaries can make use of their new rights.

8. Insurance

Governments may establish or merely promote insurance schemes designed to protect certain interests (e.g., consumers) against specific risks. Governments may also require that businesses carry private insurance for specified risks as a condition of receiving permission to operate or to carry out particular activities. In the last case, insurance is really a requirement of the regulatory regime, not an alternative to regulation.

Insurance can remove the need for highly detailed command-and-control regulation of product attributes and production processes. It forces businesses to assess risks, to determine cost-effective methods of reducing them, and to ensure that their products are priced to fully cover the cost of protective measures (e.g., implementing the desired behaviours). Insurers may develop more detailed specifications and may carry out monitoring activities. If the insurer does not assess the risk on an individual basis (including claims experience), however, the supplier no longer has a financial incentive to identify and reduce risks. This would significantly minimize economic efficiency.

Performance bonds, escrows, and restoration funds are common forms of insurance that can be used as alternatives to detailed command-and-control regulation. In Canada, there is a growing reliance on restoration funds. Under this arrangement, suppliers contribute to a fund through premiums. The fund, which may be underwritten by government, provides automatic payment to persons who have suffered loss as a result of specific occurrences.

Examples

The following are examples of insurance regimes:

- home warranty insurance (for homeowners whose buildings have deficiencies);
- travel insurance (protects consumers who have prepaid for trips against insolvent sellers or service providers);
- performance bond or restoration fund for harm suffered from using pesticides;
- worker's compensation insurance;
- manufacturers' warranties for repair of emission control devices;
- performance bonds for reclaiming land after strip mining operations;

- performance bonds for reclaiming land used for disposal of solid or toxic waste;
- performance bonds for reforestation after logging;
- restoration funds for specific health problems or environmental damage (e.g., asbestos-related problems, silicosis, offshore oil spills, PCB or other toxic waste clean-up);
- mandatory professional liability insurance for lawyers, doctors, dentists;
- insurance for carnival rides;
- performance bonds for repairing fish habitat in projects subject to the environmental assessment process; and
- assignment of liability for offshore oil spills and requirement for insurance.

Advantages

Insurance regimes may offer the following advantages:

- they are more transparent -- the cost of regulatory benefit (e.g., cleaner air) is directly reflected in the price of products;
- they allow flexibility and adaptation of desired behaviours;
- they remove problems of centralized discretionary decision-making;
- they can be focused clearly on economic determinants of behaviour;
- they are less intrusive, allowing greater freedom of choice than traditional command-and-control regulation;
- they promote economic efficiency by internalizing costs, by allowing flexibility for dynamic adjustment to changing technologies and market conditions, and by providing strong financial incentives for developing more cost-effective methods of reducing risk;
- they provide prompt and, often, automatic redress for beneficiaries;
- Government authorities may not require as much detailed knowledge of and information about target industries and behaviours; and

- they can significantly lower costs to government of developing, promoting, monitoring, and enforcing detailed behavioural requirements.

Disadvantages

Insurance systems may have the following problems:

- the public may view an indirect method of influencing behaviour as inappropriate;
- they may require auxiliary regulatory requirements to ensure full coverage (e.g., imposing the obligation to take out insurance as a condition of licensing); and
- they may be unfair if the target firms have significantly different abilities to identify and minimize risks or to pay premiums, and may favour larger, more sophisticated businesses.

Factors Favouring Use

The following conditions favour using insurance:

- the target behaviour is influenced primarily by economic factors;
- demand for the goods or products affected is highly elastic, accentuating the effects of the tax on the product's price and the impact on production behaviour;
- would result in fewer tax paying units, reducing the cost of collection and monitoring;
- there are "gates" or natural control points in the affected activities, facilitating collection, monitoring, and enforcement;
- target individuals already have potential tax liability and ability to pay; and
- targets (taxpayers or products) for new or increased tax levies can be easily and precisely identified, facilitating collection, monitoring, and enforcement.

Contraindicators

The following conditions work against using insurance:

- the target behaviour is determined primarily by social or psychological factors;

- there are relatively few suppliers (highly concentrated market) and a highly inelastic demand for the goods or products affected (levels of consumption are not significantly affected by price changes resulting from pass-through of insurance premiums, and consumers have little ability to shift their business to other suppliers); and

- there are a large number of potential firms requiring insurance, increasing the administrative costs of systems such as restoration funds.

Program Delivery Implications

If you are considering insurance systems as a method of influencing behaviour, you will want to keep the following points in mind:

- some forms of insurance (e.g., performance bonds) are more likely to result in litigation as parties seek to be indemnified; automatic recovery designs may be more efficient and provide more complete coverage;

- premiums must be based on risk to achieve maximum economic efficiency benefits;

- you will need to find efficient ways of collecting the tax or providing the tax reduction;

- you will need to be able to verify and monitor each party's liability and eligibility;

- you will have to be capable of effective audit and enforcement;

- you may need to explain the tax measures; and

- new or existing forms will have to be prepared.

Part 4: Alternative Forms of Regulation

Introduction

How you categorize regulation depends on whether you take an economic, legal, or political science approach. This guide uses the following structure to review forms of regulation:

1. Direct Product Controls
2. Supplier Entry and Exit Controls
3. Production Process Controls
4. Information Controls
5. Marketable Rights

These categories provide a practical framework for identifying and assessing alternative methods of accomplishing a regulatory policy objective. They link directly with the analytical framework outlined in Part I of this guide.

The categories also reflect prevailing views about the comparative advantages and disadvantages of each form of regulation. However, the effects of any particular regulatory approach will be determined by a variety of factors and will vary from case to case. There is no such thing as inherently good or bad regulation.

There is no single, universally accepted definition of regulation. Regulatory requirements, like other types of law, establish rights and duties for individuals. What distinguishes regulation?

The definition most commonly used in Canada was developed for the Economic Council of Canada's Regulation Reference (1979):

> Regulation, in the generic sense, is defined as the imposition of rules backed by the threat of government sanctions, with the intention of modifying or controlling private behaviour. These rules can be established in statutes, subordinate legislation (regulations), administrative procedures, orders, directives, manuals, and, implicitly, in administrative and quasi-judicial decisions.

The House of Commons Sub-Committee on Regulations and Competitiveness has proposed the following definition:

> In the simplest terms, regulation can be defined as a set of rules, made and enforced by the state, restricting or specifying the nature of social and economic activity.

Command-and-Control Regulation

The term "command-and-control regulation" is used extensively, but there is no generally accepted definition, and it is often used to denote "bad" regulation. Examples show that this type of instrument usually specifies both the performance objectives and how to achieve them. Often, both product characteristics and details of the production process are covered, and compliance requirements are specified in great detail.

1. Direct Product Controls

Price

Controls over the price of goods and services are commonly used in markets where there is a "natural monopoly" (e.g., public utilities). Firms in these markets have significant market power and can shift wealth away from consumers. Price controls can be used to control how much profit these firms make. They are typically used in conjunction with entry controls such as licensing.

There are a variety of approaches to price regulation. Rate-of-return regulation, which sets prices so that the firm will earn no more than a competitive return on equity, is the most common form used for public utilities. Alternatives to the more traditional forms are price caps and social contracts.

Examples

The following are examples of products that have been subject to regulatory price controls:

- telephone services
- transportation services
- electric power
- natural gas
- water and
- cable TV service

Advantages

Price controls may offer the following advantage:

- they protect against abusive use of market power by monopolistic firms, indirectly controlling profitability.

Disadvantages

Price controls can generate the following problems; they:

- can impede market competition and detract from economic efficiency in competitive markets;
- can hinder innovation and development of lower-cost substitutes for regulated products;
- may result in significant shifts of income from consumers to producers (regulated firms enjoy a comparative advantage in dealing with regulatory systems); and
- can result in high administrative costs for both regulatees and the Government.

Factors Favouring Use

The following condition favours using price controls:

- the relevant market is characterized by natural monopoly.

Contraindicators

The following condition works against using price controls:

- the relevant market is characterized by workable competition.

Program Delivery Implications

If you are considering price controls as a form of regulation, you will want to consider the following points:

- it will likely mean that an independent tribunal with significant infrastructure requirements (including analytical and legal capability) will have to be established; and
- it will require detailed procedures for receiving, processing, and adjudicating applications for price adjustments.

Quantity

Direct product controls may also set limits on the quantity of a product that can be produced. These limits are usually implemented through quota systems. They provide an indirect method of maintaining price levels and of ensuring the profitability of firms in markets where entry is controlled through regulation.

Examples

The following are examples of where direct regulatory controls have been used to limit quantity:

- exports of natural gas;
- agricultural products supply management regimes; and
- transport services.

Advantages

Product quantity controls may offer the following advantages:

- in markets characterized by a natural monopoly, they can help ensure a supply of product to all customers; and
- they protect against abusive use of market power by monopolistic firms, indirectly controlling pricing and profitability.

Disadvantages

Product quantity controls can create the following problems; they:

- can impede market competition and detract from economic efficiency in competitive markets;
- can hinder innovation and development of lower-cost substitutes for regulated products;
- may result in significant shifts of income from consumers to producers (regulated firms enjoy a comparative advantage in dealing with regulatory systems); and
- can result in high administrative costs for both regulatees and the government.

Factors Favouring Use

The following condition favours using product quantity controls:

- the relevant market is characterized by a natural monopoly.

Contraindicators

The following condition works against using product quantity controls:

- the relevant market is characterized by workable competition.

Program Delivery Implications

If you are considering using product quantity controls as a method of influencing behaviour, you will want to keep the following points in mind:

- it will likely mean that an independent tribunal with significant infrastructure requirements (including analytical and legal capability) will have to be established; and

- it will require detailed procedures for receiving, processing, and adjudicating applications for changes in production limits.

Product Attributes

This type of control is a common form of command-and-control regulation. Product attributes (e.g., size, appearance, content, quality, durability, safety, purity) are controlled through standards. These standards may be very general (often stated as general prohibitions in regulatory statutes or *performance standards* in regulations), or they may be highly detailed (*technical standards*).

From an economic point of view, standards can do both good and bad things. Standards control the product, but they also provide information about the quality of a product or its compatibility with that of complementary goods or processes. They can increase productivity and competitiveness by reducing costs or increasing the rationalization, interchangeability and compatibility of products. Competitive markets work best when both suppliers and consumers have sufficient information to make informed choices. When suppliers or consumers do not have the information they need, the market may fail. Because standards provide information, they can play an important role in correcting such market failures. These redeeming features of standards will become even more important in a global marketplace where production becomes more interconnected.

On the flip side, standards can increase costs, impede innovation, and limit consumer choice (by excluding lower quality but less expensive alternatives from the market). Even more important, perhaps, people tend to depend on the Government for quality assurance, and have a diminished sense of personal responsibility.

It is important to distinguish between technical standards and performance standards.

Technical Standards

Technical, or design, standards specify exactly how to comply with specifications for product attributes. This type of command-and-control standard is generally considered to be undesirable from an economic point of view. It locks in technology, reduces consumer choice, and can create a barrier to innovation and to entry by new suppliers. On the other hand, such standards do provide highly specific information about what a supplier must do to comply with them. Knowing exactly what the law requires is important to businesses.

Examples

Technical standards that specify exact means of compliance for product attributes have been used in the following areas:

- consumer packaging and labeling
- drug safety
- medical devices
- quality of seeds and
- consumer product safety.

Advantages

Technical standards for product attributes may offer the following advantages:

- they lower the cost to purchasers of obtaining and evaluating information about competing products;
- they provide exact information about the behaviours necessary for compliance;
- they diminish uncertainty about what constitutes compliance for regulatees, other players involved and regulatory authorities;
- they may lessen the cost of monitoring compliance (inspection can focus on verifying whether specific equipment or a particular design is present);
- producing products that are interchangeable and compatible can increase the number of sources of supply, promote competition, reduce risk, cut down the size and cost of inventories, raise worker productivity, and enhance the economies of large-scale operations;
- rationalizing products may lead to greater efficiency thorough economies of scale in production, inventories and consumption;
- they may cut costs and increase economic efficiency by improving the rationalization, interchangeability and compatibility of products, and may correct market failure due to production or consumption externalities, and the lack of mechanisms for shifting and reducing risk; and
- they may make it harder for firms to differentiate their products, and may increase competition based on price.

Disadvantages

Technical standards for product attributes may have the following problems:

- they can impede innovation by locking in technology;

- they reduce consumer choice by diminishing product differentiation;
- they can hinder innovation and entry of new suppliers into the marketplace;
- they may create barriers to trade;
- they may be unfair – standards may lower costs more for small firms than for larger firms;
- inspectors may require more training and expertise to assess compliance with highly detailed technical requirements.

Factors Favouring Use

The following conditions favour using technical standards as a method of controlling product attributes:

- products or services are complex, relatively costly and infrequently purchased by consumers; prospective purchasers are not able to easily detect attributes (information asymmetry);
- regulatees want or need more detailed information and certainty about what behaviours conform;
- market or products are not subject to rapid technological change; and
- independent third-party monitoring and certification programs are available to support the specifications (e.g., CSA, CGSB, UL or ISO 9000).

Contraindicators

The following conditions work against using technical standards as a method of controlling product attributes:

- market or products are subject to rapid technological change;
- imported products account for a substantial portion of the market (it is unlikely that foreign producers will adhere to Canadian specifications);
- economies of scale in production are coupled with significant export potential and there are no international standards or comparable standards in trading partner jurisdictions, putting Canadian producers at a competitive disadvantage;

- prospective purchasers can easily detect and evaluate product attributes (less information asymmetry means less justification for product standards); and

- consumers purchase affected products frequently and repeatedly and can therefore vote with their dollars.

Program Delivery Implications

If you are considering using technical standards as a method of controlling product attributes, you will want to keep the following points in mind:

- it may require significant resources and program infrastructure to support promotion, monitoring, and enforcement functions;

- inspectors may require more training and expertise to assess compliance with highly detailed technical requirements;

- it may require special powers and procedures for Customs to interdict non-conforming imported products.

Performance Standards

Performance standards set out the results or objectives to be achieved. They do not specify exactly what a supplier must do to comply with the standards, e.g., what technology must be used. The supplier must still meet a target, but can choose what method to use.

The standard, for example, may set a test of strength or some other objective performance feature for the product. The government may also set a design standard that requires a specific technology to be used but, at the same time, allows an equivalent means to be used. This permits the regulated firm to propose an alternative technology. The standard may also propose choices of technologies or approaches to compliance that are deemed to be equivalent. In each of these cases, the regulated firm has a choice about how it will comply, and may use or invent the least costly means of complying.

Examples

The following are examples of performance standards that specify product attributes:

- energy efficiency standards
- building fire-safety standards

- fuel economy standards
- food safety standards
- consumer product safety standards
- automobile safety standards
- packaging standards and
- package design standards for transporting radioactive material.

Advantages

Performance standards may offer the following advantages as a method of controlling product attributes:

- they may lower the risk of product failure;
- users may perceive a lower risk of product failure;
- they may foster the entry of new products into the marketplace, expand demand, and facilitate international trade;
- they may substantially reduce the amount of information and evaluation required in making a purchase decision, compensating for inequality in the information available to buyers and sellers;
- they are less intrusive and more flexible (regulatees are free to choose -- or invent -- the least costly method of achieving regulatory requirements;
- they minimize obstacles to competition;
- they can produce more flexible, results-oriented policy than design standards;
- the flexibility and choice offered by performance standards can produce significant cost savings for business; and
- they provide continuing incentives for innovation (regulatees benefit from finding less expensive methods of achieving compliance).

Disadvantages

Performance standards may have the following problem as a method of controlling product attributes:

- they may impede innovation and entry of new products into the marketplace;

- they may hinder the dvelopment and application of new technologies;
- they may create barriers to trade;
- they may be unfair – standards may lower costs more for small firms than for larger firms;
- they may not communicate as much information about what must be done to comply and may raise the cost of compliance;
- they may create uncertainty, which may be a concern for both regulatees and beneficiaries;
- monitoring compliance may be more difficult and more costly.

Factors Favouring Use

The following conditions favour using performance standards:

- products or services are complex, relatively costly and infrequently purchased by consumers; prospective purchasers are not easily able to detect attributes (information asymmetry);
- independent third-party monitoring and certification programs are available to support the specifications (e.g., CSA, CGSB, UL or ISO 9000);
- at least one method of meeting the performance objectives is known and is feasible;
- the industry or products are characterized by rapid technological change.
- quality standards are particularly useful in markets with:
  - greater sensitivity to variations in quality;
  - little elasticity of demand;
  - low marginal cost of providing quality; and
  - not much value placed on poor quality service.

Contraindicators

The following conditions work against using performance standards:

- imported products account for a substantial portion of the market (it is unlikely that foreign producers will adhere to Canadian specifications);

- economies of scale in production are coupled with significant export potential and there are no international standards or comparable standards in trading partner jurisdictions, putting Canadian producers at a competitive disadvantage;

- prospective purchasers can easily detect and evaluate product attributes (less information asymmetry means less justification for product standards);

- consumers purchase affected products frequently and repeatedly and can therefore vote with their dollars;

- abstract conceptualization or speculation about new technology is required to identify and describe performance objectives; and

- the regulatory goal has a highly subjective element (e.g., being "aesthetically pleasing" or not producing a "bad smell".

Program Delivery Implications

If you are considering using performance standards as a method of influencing behaviour, you will want to keep the following points in mind:

- when it is difficult to measure performance objectively, it will be harder to write the standards;

- inspection and enforcement in particular may be harder to administer;

- it may appear to give competitive advantages to larger or more sophisticated firms; and

- it may require special powers and procedures for Customs to interdict non-conforming imported products.

2. Supplier Entry and Exit Controls

If you determine who is allowed to supply a product, you are in a good position to control other matters such as price and product attributes, as well as production activities. Typically, licensing is used to control entry to, and exit from, a market. It has been used to restrict the number of people using a common property resource (fisheries, broadcasting); to limit entry to natural monopolies (local telecommunications); and to facilitate control and monitoring of supplier activities in competitive markets (air transport, truck transport).

Permits are a variant of supplier control. While they are seldom used to restrict entry, they provide a handy mechanism for exerting detailed control over production-related activities (e.g., use of pesticides).

Self-regulation is type of supplier control. Self-regulation regimes usually have several options: entry control through licensing, standards for services, controls on production activities and, when they can get away with it, price controls.

Entry controls are essential to protecting common property resources and true natural monopolies. In other situations, it is better to look for other alternatives. If entry controls really are necessary, there are "benign" variants that interfere less with the competitive processes – auctioning the licences, using marketable rights, or certifying instead of licensing.

A true certification regime is really a form of "information regulation", although it can result in de facto barriers to entry. Under certification, entry to a market or carrying on an activity is not restricted. However, you must meet qualifications (training, experience) that are set out in standards before you can be certified. A certification regime provides a lot of information simply and at low cost.

Examples

The following are examples of areas in which entry and exit controls have been applied:

- commercial and recreational fisheries
- local telecommunications
- long distance communications
- cellular telephone service
- broadcasting facilities
- cable TV service
- transportation services
- professional services and
- agricultural production

Advantages

Entry and exit controls may offer the following advantages:

- they make it easier to monitor compliance and to impose detailed behavioural controls (including information requirements); and
- they facilitate control over consumption or use of common property resources (e.g., fisheries, air, water).

Disadvantages

Entry and exit controls may have the following problems:

- they can seriously distort competitive markets, protecting entrenched interests, impeding innovation, and blunting the pressure for cost reduction and productivity enhancement;
- they may result in significant shifts of income from consumers to producers;
- they can result in high administrative costs for both regulatees and government.

Factors Favouring Use

The following conditions favour using entry and exit controls:

- a common property resource; and
- a market characterized by natural monopoly.

Contraindicators

The following condition work against using entry and exit controls:

- workable competition in the relevant market.

Program Delivery Implications

If you are considering using entry and exit controls as a method of influencing behaviour, you will want to keep the following points in mind:

- it will likely mean an independent tribunal with significant infrastructure requirements (including analytical and legal capability) will have to be established; and

- it may require extensive decentralized monitoring to identify unauthorized suppliers (e.g., unlicensed truckers).

3. Production Process Controls

In the third category of command-and-control regulation, the focus is on controlling the inputs used in the production process or the attributes of the processes themselves.

In the latter case, for example, effluent controls are designed to stop companies from consuming too much clean water. Workplace safety controls are designed to make employers and employees take action to reduce the risk of injuries.

In some cases, the objective in controlling aspects of production is to control the product itself (e.g., sanitation standards). In other cases, the objective is to control both the production process and the product (e.g., controls on the use of pesticides).

Like product controls, production controls use both technical and performance standards. In these cases, however, the requirements provide only marginal informational benefits. For more information on how to decide when control of production process attributes may be appropriate, see the discussion under Direct Product Controls: Product Attributes.

Technical Standards

Technical, or design, standards can be used to spell out exactly how to comply with specifications for the production process. This type of standard is generally considered to be undesirable from an economic point of view. It locks in technology, and can create a barrier to innovation and to entry by new suppliers. On the other hand, the standards do provide highly specific information about what a supplier must do to comply with them.

Examples

Technical standards that spell out exactly how to comply with specifications for the production process have been used in the following areas:

- occupational safety and health
- Workplace Hazardous Materials Information System (WHMIS)
- marine safety
- air transport safety
- highway transport safety and
- transportation of dangerous goods

Advantages

Technical standards for the production process may offer the following advantages:

- they provide exact information about the behaviours necessary for compliance, reducing uncertainty among regulatees, other involved players and regulatory authorities;
- they may lessen the cost of monitoring compliance (inspection can focus on verifying whether specific equipment or a particular design is present);
- where process standards are intended as an indirect control over product attributes, they may lower costs and increase economic efficiency by improving the rationalization, interchangeability and compatibility of products, and may correct market failure due to production or consumption externalities, and the lack of mechanisms for shifting and reducing risk; and
- where process standards are intended as an indirect control over product attributes, they may make it harder for firms to differentiate their products and lead to increased competition based on price.

Disadvantages

Technical standards for production processes may have the following problems:

- they can impede innovation by locking in technology;
- where process standards are intended as an indirect control over product attributes, they may reduce consumer choice by diminishing product differentiation;
- they can hinder innovation and entry of new suppliers into the marketplace;
- they may create barriers to trade; and
- inspectors may require more training and expertise to assess compliance with highly detailed technical requirements.

Factors Favouring Use

The following conditions favour using technical standards as a method of controlling production processes:

- when process standards are intended as an indirect control over product attributes: products or services are complex, relatively costly and infrequently purchased by consumers, and prospective purchasers are not easily able to detect attributes (information asymmetry);

- regulatees need or want more detailed information and certainty about what behaviours conform;

- production processes are not subject to rapid technological change; and

- independent third-party monitoring and certification programs are available to support the specifications (e.g., CSA, CGSB, UL or ISO 9000).

Contraindicators

The following conditions work against using technical standards as a method of controlling production processes:

- production processes are subject to rapid technological change;

- where process standards are intended as an indirect control over product attributes: imported products account for a substantial portion of the market; and

- economies of scale in production are coupled with significant export potential and there are no international standards or comparable standards in trading partner jurisdictions, putting Canadian producers at a competitive disadvantage.

Program Delivery Implications

If you are considering using technical standards as a method of controlling production processes, you will want to keep the following points in mind:

- it may require significant resources and program infrastructure to support promotion, monitoring, and enforcement functions; and

- inspectors may require more training and expertise to assess compliance with highly detailed technical requirements.

Performance Standards

Performance standards for production processes set out the general attributes of the process. They do not specify exactly what a supplier must do to comply with the standards, e.g., what technology must be used. This permits the regulated firm to propose an alternative method of compliance. The standard may also propose choices of technologies or approaches to compliance that are deemed to be equivalent. In each of these cases, the regulated firm has a choice about how it will comply, and may use or invent the least costly means of complying.

For example, a performance standard for a production process may state that the maximum allowable limit of asbestos fibres that can be ingested by workers is *x* per hour. The standard does not specify whether this is to be achieved by removing the source, installing air filters in circulation systems, increasing fresh air circulation, limiting the workers' exposure, or having employees wear protective devices or breathing equipment.

In the environmental area, a performance standard may specify that a plant may emit a maximum of *x* parts per million of NOx over a certain time period. Again, the standard does not specify whether this is to be achieved by cutting back production, using cleaner production technology, using different inputs (e.g., cleaner coal), or using scrubbers or other end-of-stack abatement technology. In both cases, the regulated firm chooses how it will comply and has an incentive to continually seek more cost-effective solutions.

Examples

The following are examples of production process standards using performance standards:

- occupational safety and health standards (e.g., walkways and hazards that may cause falls); and
- air and water pollution controls (e.g., plant-wide bubble policy).

Advantages

Performance standards may offer the following advantages as a method of controlling production processes:

- they are less intrusive and more flexible (regulatees are free to choose -- or invent -- the least costly methods of achieving regulatory requirements);

- they can produce more flexible, results-oriented policy than design standards;

- the flexibility and choice offered by performance standards can produce significant cost savings for business by making it possible to use a more cost-effective method to achieve compliance; and

- it provides continuing incentives for innovation (regulatees can benefit from finding less expensive methods of achieving compliance).

Disadvantages

Performance standards for production processes may have the following problems:

- they may not communicate as much information about what must be done to comply, and may therefore raise the cost of compliance;

- it may create uncertainty for both regulatees and beneficiaries;

- it may be more difficult and more costly to monitor compliance with performance standards since inspection can no longer focus on simply verifying whether specific equipment or a particular design is present (and inspectors may require more training and expertise).

Factors Favouring Use

The following conditions favour using production process performance standards:

- where process standards are intended as an indirect control over product attributes: products or services are complex, relatively costly and infrequently purchased by consumers, and prospective purchasers are not easily able to detect attributes (information asymmetry);

- independent third-party monitoring and certification programs are available to support the specifications (e.g., CSA, CGSB, UL or ISO 9000);

- at least one method of meeting the performance objectives is known and is feasible; and

- the production process is characterized by rapid technological change.

Contraindicators

The following conditions work against using production process performance standards:

- imports accounts for a substantial portion of the market; this may place Canadian producers at a competitive disadvantage;
- economies of scale in production are coupled with significant export potential and there are no international standards or comparable standards in trading partner jurisdictions; this may place Canadian producers at a competitive disadvantage;
- abstract conceptualization or speculation about new technology is required to identify and describe performance objectives.

Program Delivery Implications

If you are considering using performance standards as a method of controlling production processes, you will want to keep the following points in mind:

- when it is difficult to measure performance objectively, it will be harder to write the standard;
- inspection and enforcement, in particular, may be harder to administer; and
- it may appear to give competitive advantages to larger or more sophisticated firms.

4. Information Controls

Pure Information Disclosure Requirements

This form of regulation requires that information about the attributes of a product, process, or situation (e.g., dangerous working conditions) be disclosed. The information usually appears in a standardized format, a result of labeling requirements, advertising controls, or disclosure statements. A disclosure scheme can either substitute for, or supplement, other forms of regulation. Because it does not regulate by setting a standard for the product, production processes, inputs, prices, or allocation of goods, it is a more desirable alternative to command-and-control regulation. While the requirements will state what matters are to be covered in the disclosure, the content of the disclosure depends on the actual circumstances where the good or service is produced.

Examples

The following are examples of pure information disclosure as a form of regulation:

- automobile gas consumption ratings
- tobacco tar and nicotine ratings
- requirements for securities prospectuses
- warnings on cigarette packages
- Workplace Hazardous Materials Information System (WHMIS)
- grading and labeling of tires
- energy efficiency labels for appliances
- food grading
- food product labeling and
- information disclosure requirements for drugs

Advantages

Using pure information disclosure requirements may offer the following advantages:

- it is less paternalistic than traditional command-and-control regulation;
- it can enhance competition and promote economic efficiency;
- it preserves incentives for innovation;
- it may promote high quality goods, services and practices;
- it is less intrusive;

- it facilitates the buyer's choice by reducing the cost of gathering and evaluating information (e.g., informed buyers can better compare products, assess substituting one for another, and select those having the desired characteristics at a given price);

- it makes certain products available that otherwise might not be safe for distribution to the public;

- compliance costs may be lower (cost of providing information is generally outweighed by such factors as the flexibility permitted in production processes and design choices); and

- it minimizes the cost to the Government of developing behavioural specifications, and promoting, monitoring, and enforcing them

Disadvantages

Pure information disclosure may have the following problems:

- the public may consider that this indirect method of attacking the problem is not responsive enough;

- it may not result in sufficient change in behaviour;

- it may take longer to achieve the desired change in behaviour; and

- it may be difficult to determine the information that will be useful to, and used by, prospective buyers.

Factors Favouring Use

The following conditions favour using pure information disclosure:

- lack of information about the risks or attributes of a product has been identified as a key factor influencing behaviour of users (e.g., consumers or workers);

- products or services are complex, relatively costly and infrequently purchased by consumers; users are not easily able to detect attributes (information asymmetry);

- products or processes are subject to rapid technological change;

- risk levels are moderate or lower;

- effects of poor choices are ambiguous or hidden; and
- no firm has a sufficient incentive to disclose information.

Contraindicators

The following conditions work against using pure information disclosure:

- risks to health or safety are high;
- relevant attributes of products or processes are easily detected and evaluated (less information asymmetry means less justification for mandatory disclosure);
- effects of poor choices are visible and unambiguous;
- changes in behaviour resulting from the provision of improved information would be too slow to meet expectations;
- imported products account for a substantial portion of the market (it is unlikely that foreign producers will adhere to Canadian disclosure specifications); and
- consumers use affected products or are exposed to the processes frequently or repeatedly, allowing them to vote with their dollars.

Program Delivery Implications

If you are considering using pure information disclosure requirements as a method of influencing behaviour, you will want to keep the following points in mind:

- the regulator should have a sophisticated understanding of the regulated businesses' processes;
- you must identify the target audience accurately;
- you must determine the amount and type of information that would be useful and would actually be used by those receiving it, and must consider problems such as incomplete or imbalanced comparative information, overly technical details, and use of jargon;
- you must consider the appropriate form of the disclosure (information must be easily available to the target audience);

- you must consider the potential unintended consequences of information disclosure (e.g., incomplete or overl; technical information about the risks of a drug's side effects);

- you will have to be capable of monitoring and enforcement (including decentralized monitoring in the marketplace or workplaces);

- it may require you to communicate how significant the information is and how to use it; and

- it may require special powers and procedures for Customs to interdict non-conforming imported products.

Restrictive Information Controls

Some forms of information control regulation are hybrids, incorporating restrictions on products and processes. For example, standards may require that products be graded, and that the grade be disclosed; they may also prohibit products from being sold if they do not fall within the specified categories. Food standards may prohibit a product from being sold under a particular name if it has not been produced according to a specified process.

These types of regulatory requirements are primarily informational in nature. They are intended to simplify and control product information and to ensure that it is provided to the purchasers. However, such controls accomplish this objective, in part, by placing restrictions on the products themselves. To this extent, restrictive information controls share some of the advantages and disadvantages of standards.

Examples

The following are examples of restrictive information controls as a form of regulation:

- grading standards
- composition standards and
- some forms of labeling

Advantages

Restrictive information controls may offer the following advantages:

- they are somewhat less paternalistic than traditional command-and-control regulation;

- they can enhance competition and promote economic efficiency;
- they are less intrusive;
- they facilitate choice for the target audience by reducing the cost of gathering and evaluating information about competing products;
- product rationalization may lead to increased efficiency through economies of scale in production, inventories, and consumption; and
- they may make it harder for firms to differentiate their products and may increase competition based on price.

Disadvantages

Restrictive information controls may have the following problems:

- they may reduce consumer choice and product differentiation;
- they may impede innovation by locking in the technology necessary to meet inherent product restrictions;
- they can hinder innovation and the entry of new suppliers into the marketplace;
- they may create barriers to trade; and
- inspectors may require more training and expertise to assess compliance with highly detailed technical requirements relating to product characteristics.

Factors Favouring Use

The following conditions favour using restrictive information controls:

- products or services are complex, relatively costly and infrequently purchased by consumers; users are not easily able to detect attributes (information asymmetry);
- the market or products are not subject to rapid technological change; and
- independent third-party monitoring and certification programs are available to support the specifications (e.g., CSA, CGSB, UL or ISO 9000).

Contraindicators

The following conditions work against using restrictive information controls:

- the market or products are subject to rapid technological change;
- imported products account for a substantial portion of the market (it is unlikely that foreign producers will adhere to Canadian specifications);
- economies of scale in production are coupled with significant export potential and there are no international standards or comparable standards in trading partner jurisdictions, putting Canadian producers at a competitive disadvantage;
- users can easily detect and evaluate product attributes (less information asymmetry means less justification for product standards); and
- consumers purchase affected products frequently and repeatedly, allowing them to vote with their dollars.

Program Delivery Implications

If you are considering using restrictive information controls as a method of influencing behaviour, you will want to keep the following points in mind:

- it may require substantial program resources for developing and updating regulatory requirements;
- it may require special powers and procedures for Customs to interdict non-conforming imported products;
- the regulator should have a sophisticated understanding of the regulated businesses' processes;
- you must identify the target audience accurately;
- you must determine the amount and type of information that would be useful and would actually be used by those receiving it, and must consider problems such as incomplete or imbalanced comparative information, overly technical details, and use of jargon;
- you must consider the appropriate form of the disclosure (information must be easily available to the target audience);

- you must consider potential unintended consequences of information disclosure (e.g., incomplete or overly technical information about the risks of a drug's side effects);

- you will have to be capable of monitoring and enforcement (including decentralized monitoring in the marketplace or workplaces); and

- you may need to communicate how significant the information is and how to use it.

5. Marketable Rights

One form of "market-friendly" regulation is the marketable rights regime. Marketable rights to engage in a restricted activity or to use a scarce resource are created by the government and can be bought and sold. Once the rights are distributed, market forces control the activity or use. The size of allocation might be based on a natural scarcity or limitation (e.g., the radio spectrum) or might be imposed by government (e.g., the total population density in a downtown core). The original allocation of the rights can be handled by the government in various ways: through a lottery or auction, or on an historical or first-come, first-served basis. Once the market is created, the government may act as a broker or trading may be almost totally private. The newly created market identifies which users place the highest value on the right.

These regimes typically employ a mixture of command-and-control measures (including entry controls and production control standards) and mini-infrastructure regulations. They are by no means non-regulatory. They are designed, however, to use market forces. Harnessing them successfully achieves economic efficiencies and provides innovative, lower-cost methods of complying with regulatory requirements.

Examples

The following are examples of situations in which marketable rights could be used:

- air pollution controls
- water pollution controls
- allocation of air wave frequencies
- urban development (building permits)
- water rights
- fishing quotas
- export controls and
- import controls.

Advantages

A marketable rights regime may offer the following advantages:

- it can reduce administrative costs to government by relying on the marketplace to make decisions (e.g., regulators might need less information about abatement technology options);

- it may lower compliance costs for regulatees by removing the need for certifying production processes and technologies);

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- it provides flexibility for the Government to adjust the use of a resource (e.g., by creating more rights, or by purchasing rights and then removing them from the market);

- it can remove the Government from difficult, contentious, and lengthy decisions about who can best use scarce resources;

- it is less intrusive – it allows firms the flexibility to decide how to achieve a regulatory objective, provided they meet the goals and targets established by governments;

- promotes economic efficiency and innovation – it creates incentives for developing innovative and cost-effective methods of meeting requirements (a firm that becomes especially efficient in its use of a scarce resource or level of restricted activity can sell surplus rights);

- greater flexibility allows regulatory objectives to be achieved at a lower aggregate compliance cost (e.g., allows regulatees with the lowest abatement costs to reduce discharges even more instead of requiring all sources to meet the same pollution standard);

- provides a continuing economic incentive for firms to engage in the desired behaviours and therefore to develop and implement new technologies and processes;

- makes it feasible to set more ambitious regulatory goals, or encourage faster achievement of objectives, than is possible through other forms of regulation;

- can be used to achieve multiple environmental objectives more easily than would be possible with other forms of regulation (the approach is based on recognition that the company involved, not the regulator, is in the best position to make a judgment as to the least-cost method of achieving compliance);

- can more easily accommodate entry of new firms into, and growth within, an industry, without generating an increase in the use of a resource (new firms can be allowed to enter an industry provided they acquire the necessary permits from existing participants). Under a command-and-control regulatory system without entry controls, consumption of the scare resource would increase. Imposing entry controls would have adverse economic efficiency consequences;

- improved cost-effectiveness can result in faster and more extensive behavioural change; and

- may generate greater support for adopting more stringent behavioural requirements if economic instruments are available (allows firms more flexibility in adapting their operations to meet requirements).

Disadvantages

Marketable rights may have the following problems:

- some players may object to the idea of the Government's granting and allowing the sale of rights to pollute;

- market failures may prevent the system from operating as planned (requires constant monitoring by regulatory authorities); and

- they may require entry controls and more extensive support of the monitoring and enforcement functions.

Factors Favouring Use

The following conditions favour using marketable rights:

- a permit system is suitable for controlling the problem (i.e., the problem is related to over-use of a resource, the need for allocation to potential users, or insufficient compensation for consumption of a resource);

- it makes no difference who the user of the controlled rights is;

- the market itself must be free of major structural defects and have enough potential traders to allow the rights to be traded efficiently.

Contraindicators

The following conditions work against using marketable rights regimes:

- the relevant market has few participants;

- the target market is characterized by significant information deficiencies, hindering exchange transactions;

- the identity of the users is important (e.g., Aboriginal fishing quotas); and

- there is a significant imbalance in the wealth of market participants, possibly resulting in unfair redistribution of rights through the market process.

Program Delivery Implications

If you are considering using a marketable rights regime as a method of influencing behaviour, you will want to keep the following points in mind:

- the regulator must be able to determine the overall number or level of rights;
- the regulator must be capable of keeping track of who holds the rights;
- it may take several years to develop healthy markets and trading systems for rights;
- the Government will have to determine the features of the permit (is it permanent or temporary, based on units or stratified by priority or class of ownership?);
- the Government will have to determine the initial allocation scheme (auction, lottery, distribution based on "grandfather" provisions or a hybrid scheme);
- the Government will have to expend resources on designing establishing, and operating such features as public education, brokers, and "gatekeeping" functions;
- the Government will have to establish or maintain a supporting regulatory system, including rule-making, monitoring, and enforcement functions;
- market defects, including uncertainty perceived by participants, concentration of permit ownership, and market thinness can complicate the establishment and operation of the system;
- institutional barriers (e.g., disputes over initial allocation, interest in maintaining the status quo, and controversy over the "correct" number of permits) may complicate establishment of the system;
- changes in the value of property rights may result in tax liabilities (you must determine tax treatment); and
- it may require entry controls and setting eligibility requirements for firms that want to enter the target markets.